

Research Report 1346

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Management System for Integrating Basic Skills II Training and Unit Training Programs

Roy Avant and Wendy McGuire
McFann-Gray & Associates

Jack H. Hiller
Army Research Institute

ARI Field Unit at Presidio of Monterey
Training Research Laboratory

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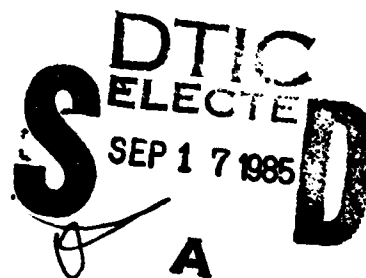


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EDGAR M. JOHNSON
Technical Director

L. NEALE COSBY
Colonel, IN
Commander

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McFann-Gray & Associates, Inc.

Technical review by

Melissa S. Berkowitz
James A. Thomas

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Item 20 (Continued)

demand areas. Data demonstrate that the curriculum components tested lead to TABE gains comparable to those obtained with both teacher-taught and CAI BSEP II curricula currently in use at the test site. ←

This report describes the total research effort and reports the results of a field test. It includes specific procedures to match BSEP II lessons with Soldier's Manual tasks. Related documents include ARI Research Note 83-38, BSEP II Lesson Developer's Guide, and ARI Research Note 83-36, Classroom Materials for Job-Related BSEP II Program, which contains all the prototype lessons and associated class management instruments that were developed and tested.

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Roy Avant and Wendy McGuire
McFann-Gray & Associates

Jack H. Hiller
Army Research Institute

Submitted by
James A. Thomas, Chief
ARI Field Unit at Presidio of Monterey

Approved as technically adequate
and submitted for publication by
Harold F. O'Neill, Jr., Director
Training Research Laboratory

U.S. ARMY RESEARCH INSTITUTE FOR THE BEHAVIORAL AND SOCIAL SCIENCES
5001 Eisenhower Avenue, Alexandria, Virginia 22333

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Basic Skills II

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FOREWORD

The Monterey Field Unit has as its primary mission the execution of research to improve training in units. The Unit Training Program (UTP) Team has concentrated over the past several years on the unit training environment.

Unit training is governed by the Battalion Training Management System (BTMS). The UTP Team conducted the research and development underlying the BTMS for the Army Training Board (proponent for unit training management) during the period 1975 through 1978. A field test of the prototype BTMS held during 1978 demonstrated that a hostile training environment could easily frustrate any training management system. At the request of DCSOPS Training, FORSCOM DCSOPS, and the Army Training Board, research was conducted from 1979 to 1982 to determine how to improve the unit training environment.

This report describes the research program design and execution for an element focused on improvement of the Basic Skills Education Program. The thrust of this research was to design a program that would be directly relevant to Army life and work, unlike the commercially available materials generally in use.



EDGAR M. JOHNSON
Technical Director

MANAGEMENT SYSTEM FOR INTEGRATING BASIC SKILLS II TRAINING
AND UNIT TRAINING PROGRAMS

EXECUTIVE SUMMARY

Requirement:

This report describes the methods used and the results obtained in the design, development, and field test of a management system for integrating the Basic Skills Education Program, Phase II (BSEP II), and unit training programs. In addition to this report of the total research effort, two additional documents have been prepared: BSEP II Lesson Developer's Guide (Research Note 83-38) and Classroom Materials for Job-Related BSEP II Program (Research Note 83-36).

Procedure:

The general approach taken to develop the management system, to design and develop curriculum materials, and to write the lesson developer's guide followed the four-step sequence of activities listed below:

- o Step 1--Design Integrated BSEP II/Unit Training Management System.
- o Step 2--Design Procedures to Mate BSEP II Lessons with Specific Soldier's Manual (SM) Tasks for Maximum Learning and Transfer of Training.
- o Step 3--Prepare Prototype Lesson Plans and Lesson Developer's Guide.
- o Step 4--Design and Execute a Field Test of the Prototype Integrated BSEP II/Unit Training System.

Following this procedure, a class management system was developed for the delivery of three integrated curriculum components: (1) a Literacy Skills component that includes basic language, math, and reading skill requirements; (2) a Life Coping Skills component that addresses specific life coping skills that were determined to be particularly important to the soldier population at Fort Ord, CA; and (3) a Learning Strategies component that provides training in the areas of reading comprehension, memorization, concentration, and test-taking skills.

The management system and course materials were tested during a 5-month period at the Education Center at Fort Ord to determine their utility and effectiveness in integrating BSEP II and unit training programs. Evaluation data were collected throughout the test period and were used to revise lesson modules and to modify the class management system.

Findings:

The management system and curriculum materials provide an effective integration of training efforts that meets certain of the requirements for both BSEP II and unit training programs. Test data demonstrate that a BSEP II curriculum built substantially from selected SM materials can contribute to the acquisition of basic literacy skills. Based on results obtained on the Test of Adult Basic Education (TABE), students participating in the test curriculum achieved grade level gains comparable to those obtained by students in the standard and CAI BSEP II courses delivered at Fort Ord.

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CHAPTER 1 INTRODUCTION

Background

The research effort described in this report was part of a three-year program that was conducted to develop management innovations for operational units which will increase the time and resources that can be applied to combat training.¹ During earlier work in the program, two major detractors to combat training were identified at the company/battery level: 1) insufficient numbers of personnel and 2) low performance level of the personnel assigned. Among other frequently mentioned problems was the necessity of sending unit personnel to required training programs, including the Basic Skills Education Program, Phase II (BSEP II). The simultaneous concern for personnel availability and competent performance is indicative of a dilemma shared by most unit leaders in the Army today. The dilemma results in part from the fact that many tasks which were previously taught during initial entry training have been 1) eliminated from training completely, 2) assigned to the unit for training, or 3) assigned to a later course of instruction such as one of those contained in the Noncommissioned Officer Education System (NCOES). Complicating the training problem further is the requirement to provide for many soldiers a level of literacy which is prerequisite to successful learning and performance.

While most leaders value and support training conducted within the NCOES, BSEP II training is usually seen as a detractor from and disrupter of unit training because unit personnel are lost for extensive periods of time with no benefit occurring as a consequence. The connection between poor individual performance in the unit and deficits in literacy skills is not easily recognized. This is especially true in an environment where leaders are already greatly

¹ For a detailed description of the larger research program, refer to: Best, P.R., & Hiller, J.H., Development and Evaluation of Management Alternatives, Job Preparation Packages and Battle Drill Guidelines: Final Technical Report, ARI Technical Report 601.

stressed in their efforts to balance individual and collective combat training with many other demands (e.g., post support, administrative requirements, and routine garrison tasks). This tenuous connection between job performance and literacy skills is itself a highly problematical condition. When literacy skill training is also viewed as a detractor and disrupter, the urgency of the need to improve on the existing system is compounded. The goal of this research effort, therefore, was to *modify the delivery of BSEP II training to maximize its relevance to the unit's tactical needs*. As such, it complements, and represents an interim response to, the Army's decision to develop and implement a Functional Basic Skills Program.²

Scope

Our approach was to apply the principles of transfer of training to BSEP II training development in a way that maximized positive transfer from BSEP II training to unit training requirements. Two specific procedures were employed to accomplish this goal: BSEP II training materials were developed using Soldier's Manual (SM) tasks as content; and a management system was developed which integrates BSEP II and unit training. Research activities were divided into the four steps listed below:

- Step 1 - Design an Integrated BSEP II/Unit Training Management System.
- Step 2 - Design Procedures to Mate BSEP II Lessons with Specific SM Tasks for Maximum Learning and Transfer of Training.
- Step 3 - Prepare Prototype Lesson Plans and Lesson Developer's Guide.

² This 5 year project is described in TRADOC Regulation 621-1, Basic Skills Education Program Curriculum Development Project, 25 February 1980.

- Step 4 - Design and Execute a Field Test of the Prototype Integrated BSEP II/Unit Training System.

Report Organization

This report provides a description of the design, development, and test activities that were conducted in order to provide the principal deliverables represented in the four-step format presented above.

The BSEP II Lesson Developer's Guide prepared within Step 3 is available as ARI Research Note 83-38. The guide was written as a self-contained aid to assist Army BSEP II managers and course writers in the following activities:

- Understanding BSEP II and determining local needs.
- Choosing and categorizing SM materials for lesson development.
- Writing effective BSEP II materials.

All prototype lessons developed and tested during the research project along with their associated class management instruments (e.g., diagnostics, previews and reviews, and module record sheets) are contained in Classroom Materials for Job-Related BSEP II Program, available as ARI Research Note 83-36. Lesson materials in RN 83-36 are arranged in the order in which they are presented within the two major curriculum components:

- Literacy Skills
- Learning Strategies

A third curriculum component, Life Coping Skills, is embedded in certain modules of the Literacy Skills Course (i.e., Math Story Problems and Reading Course materials).

CHAPTER 2

OVERVIEW OF BASIC SKILLS INSTRUCTION IN THE ARMY

The Army's on-duty education programs were for many years directed toward the correction of literacy problems in reading, writing, and math. Early efforts in this regard were focused on the need to improve general literacy skills for the large group of enlistees that began entering the Army in 1964 under Project 100,000. These soldiers attended classes to improve reading proficiency before they went on to Basic Training. A series of HumRRO research projects led the Army in 1974 to adopt a program to improve soldier performance in Advanced Individual Training.¹ This Advanced Individual Training Preparatory Training (AITPT) program provided reading instruction that was developed for six MOS areas, using military manuals as source materials. Then in 1978, AR 621-45, Basic Skills Education Program, provided for a three-phase BSEP (BSEP I, II, and III) to develop job-related educational competencies and skills and to assist in soldier career growth. This three-phase format was carried forward into the current BSEP regulation (AR 621-5) but with a major redesign plan incorporated. This redesign effort followed an in-depth review of the Army Continuing Education System (ACES) by the Assistant Secretary of the Army.² The Secretary of the Army and the Army Chief of Staff then issued a joint memorandum which directed that a plan be prepared that implemented the recommendations contained in the ACES review report.³ Those recommendations were directed primarily toward the development of an Army approved curriculum for providing job-related basic skills training. Training and Doctrine Command (TRADOC) was charged with responsibility for planning and implementing many of the initiatives associated with the redesign effort. A

¹ See Sticht, Thomas G. A Program of Army Functional Job Reading Training: Development, Implementation, and Delivery Systems. HumRRO Report FR-WD (A)-75-7, June 1975.

² Department of the Army Memorandum, Subject: Army Continuing Education Policy and Recommendations, 7 August 1979.

³ Chief of Staff Memorandum, Subject: Army Continuing Education Policy and Recommendations Study, 29 August 1979.

five-year (1981-86) plan was published in the form of TRADOC regulation 621-1, Implementation of Army Continuing Education Policy and Recommendations Plan, January 1980. This plan calls for the development of a curriculum and supporting minimum competency tests for the following subprogram areas:

1. MOS Baseline Skills
2. Military Life Coping Skills
3. Learning Strategies
4. English as a Second Language

TRADOC, working with several contractors, is in the process of identifying baseline skills for the 95 most populous initial-entry MOSs. Standardized training packages will then be prepared for each BSEP skill to be taught.

The Current Basic Skills Education Program

AR 621-5, Army Continuing Education System (ACES), 15 October 1981, describes the current BSEP as the commander's primary on-duty education program for enlisted personnel. The program is designed to develop educational competencies required for a soldier's job performance, enhance skill qualifications, and provide for career growth. A partial listing of the Army's educational goals for enlisted and noncommissioned officers as described in AR 621-5 is:

- Enlisted personnel
 1. Master educational skills needed to perform military duties.
 2. Earn a high school diploma or state-issued high school equivalency certificate by the end of the first enlistment.
- Noncommissioned officers
 1. Obtain a high school diploma or a General Educational Develop-

ment (GED) equivalency certificate and a General Technical (GT) score of 90 or above before promotion to E-6.⁴

2. Earn an Associate's degree or complete two years of college study in management or in a field of study related to their military specialty before the 15th year of service.

The three phases of BSEP are:

- BSEP I for soldiers within the initial entry training system. Selected trainees are to receive up to 100 hours of basic literacy instruction in the areas of reading, writing, arithmetic, and language skills in support of MOS training. BSEP I is designed to raise literacy skills to the fifth grade level as measured by the Adult Basic Learning Examination (ABLE). English as a Second Language (ESL) is also provided.
- BSEP II for soldiers serving at permanent duty stations in MOS skill levels 1 and 2 (i.e., grades E1-E5). This phase of BSEP is designed to raise language and computational skills to the ninth grade level as measured by the Test of Adult Basic Education (TABE). As a general rule, up to 360 hours of instruction are allowed. Since BSEP II is the principal focus of this report, it is described in more detail below.
- Advanced Skills Education Program (ASEP) for soldiers serving at permanent duty stations in MOS skill levels 3, 4, and 5 (grades E6-E8). It is designed to provide on-duty education opportunities to help noncommissioned officers meet their responsibilities as supervisors, managers, and communicators.

The current project described in this report focuses only on BSEP II training.

⁴ The GT score is taken from parts of the Armed Services Vocational Aptitude Battery (ASVAB).

BSEP II

This phase of BSEP provides instruction in reading, writing, speaking, listening, and computational skills needed to perform military duties through grade E5. It is to be oriented to military jobs performed by the students and is to include military life coping skills and learning strategies. The Test of Adult Basic Education (TABE) is used to determine placement and achievement. BSEP II is expected to raise literacy skills to at least the ninth grade level as measured by the TABE.⁵ According to AR 621-5, soldiers are normally identified as potentially eligible for BSEP II for one of the following reasons:⁶

- A GT score of less than 90.
- An assessment of need as made by the soldier, his supervisor or commander.
- An unsatisfactory score on the Skill Qualification Test (SQT).

Currently, BSEP II instruction is designed and delivered by regionally or nationally accredited schools that employ instructors who are certified to be teachers of the required curriculum. AR 621-5 provides contract specifications for the design and delivery of a program that is to be limited to 360 hours of classroom instruction (exclusive of ESL components). Since the Education Services Officer (ESO) at each installation is responsible for contracting for BSEP II instruction, there is considerable variance in the program throughout the Army.

The ESO is to enroll eligible soldiers according to priorities listed here in descending order:

⁵ English as a Second Language (ESL) instruction may be included as a part of BSEP. ESL course materials are provided by the Defense Language Institute, English Language Center.

⁶ Administrative screening procedures may vary at each installation. Those used at Fort Ord are described later.

- Soldiers with high reenlistment potential.
- Soldiers with high leadership and promotion potential.
- Soldiers who need BSEP II to meet current MOS and job requirements.
- Soldiers desiring to raise their ASVAB score for a different MOS or Army School.

BSEP II completion criteria is established as a ninth grade level or above on alternate forms of the TABE. If a soldier has not completed the program after 240 classroom hours of instruction, the instructor, ESO, and commander are to decide if the soldier's progress warrants continuation or termination.

BSEP II At Fort Ord, California

The principal BSEP II screening activities at Fort Ord occur during the individual's inprocessing cycle. The initial screening criteria are as follows:

- No high school diploma or GED certificate.
- A GT score of less than 90.
- A score below 36 on the SelectABLE.⁷
- An unsatisfactory score on the SQT.

All soldiers who meet any one of the above criteria are required to take the TABE during the inprocessing cycle. Those who fail to achieve a ninth grade level are identified as BSEP II eligibles, and Education Center counselors advise them and their unit commander regarding available education programs. Although counselors do not share a common decision-logic in advising BSEP II

⁷ Though not required to do so, Fort Ord administers the SelectABLE to all newly arrived soldiers below the grade of E-6.

eligibles, their recommendations to the soldier and his commander are generally of the following form:

- | | |
|------------------|----------------------------|
| Low TABE Scores | ● BSEP II Classes |
| | ● ASVAB Class ⁸ |
| | ● Practice GED Test |
| | ● GED Test |
| High TABE Scores | ● Night High School |

While not formally recognized, this hierarchy represents a practical approach to the solution of a soldier's needs and is based on the counselor's sensitivity to organizational values and individual motivation.

BSEP II instruction at Fort Ord is provided by the Adult Education office of the Monterey Peninsula Unified School District (MPUSD) at no cost to the Army.⁹ State-certified teachers, working as part-time, hourly employees of MPUSD, use Fort Ord Education Center facilities and commercial materials to instruct in two basic literacy skill areas: language/reading and math. While no formal syllabus or curriculum is used, instructors pursue a common approach through their use of identical commercial materials.

The program is administered by a BSEP II Course Coordinator in the Education Center who schedules from one to five BSEP II classes at four-week intervals throughout the year. Classes are conducted four hours each work day (two hours of language/reading and two hours of math) for four consecutive weeks. As a rule, soldiers attend only during a four-week period when their unit is not scheduled for mission-related training.¹⁰ Based on a review of individual TABE

⁸ ASVAB, or GT Improvement, classes provide instruction and drill on vocabulary and math story problems designed to raise the soldier's GT score.

⁹ Average Daily Attendance (ADA) credit obtained via instruction provided at Fort Ord supports allocation of state funds to MPUSD.

¹⁰ Called a "Support Cycle." There are five or six of these periods that are spaced over the course of a year.

scores, soldiers are assigned to one of three course categories: 1) math only, 2) language/reading only, or 3) math and language/reading. Thus, for a single, four-week class, the total number of hours a soldier spends in the classroom will vary from a low of 40 hours for the math-only or language/reading-only student to a high of 80 hours for the student enrolled in both components. Training holidays, national holidays, processing, testing, and counseling result in further decrements in the amount of time that is actually devoted to classroom instruction.¹¹

When more than one BSEP II class is conducted during the same four-week period, the course coordinator assigns students to classes according to gross skill level differentials as indicated by TABE scores.

All students retake the TABE at the end of each four-week class period. Depending on individual TABE scores, a soldier may be advised to repeat BSEP II or enroll in another education program suited to his/her particular needs. If the soldier repeats BSEP II, he/she may do so during the next regularly scheduled support cycle which usually occurs some five or six weeks later.

¹¹ A conservative estimate of total hours of actual instruction for the math and language/reading components over the four-week period is 55 hours.

CHAPTER 3 INTEGRATING BSEP II AND UNIT TRAINING

UNIT TRAINING ENVIRONMENT

General

To develop methodology for integrating BSEP II and unit training activities, project team members studied in detail the two management systems that most directly influence the conduct of training at the unit level: the Enlisted Personnel Management System (EPMS) and the Battalion Training Management System (BTMS.) The purpose of the study was to identify those components in the larger management systems that would best facilitate a meaningful integrative effort. This involved isolating a sufficiently narrow and appropriate segment of the unit training environment to serve as a focus for developing a BSEP II curriculum conforming to the specifications outlined in AR 621-5.

One approach to this integration is to use soldier training materials. Yet the volume, variety, and complexity of such materials, combined with the wide disparity in specific needs of individual soldiers, complicates the task immensely. A major outcome of this phase of the project, therefore, was to develop systematic procedures to identify and select appropriate soldier training material. Our criteria for this developmental effort were that the materials identified:

- Be appropriate to the tasks of teaching basic literacy skills, military life coping skills, and/or learning strategies.
- Be relevant to soldier tasks for those MOSs represented in the student population.
- Be perceived by unit leaders as contributing to the accomplishment of unit training tasks.
- Deal with soldier tasks that are not being performed well.

EPMS and BTMS

The Enlisted Personnel Management System (EPMS) provides for the professional development of every enlisted soldier. It is a coordinated system that governs the evaluation, classification, assignment, and promotion of enlisted members.

EPMS emphasizes the acquisition and maintenance of soldier proficiency within specified career management fields through formal and informal training. The objectives of EPMS are to:

- Provide a logical and usable road map guiding soldiers by the most direct route from E-1 to E-9.
- Eliminate promotion bottlenecks and offer fair promotion opportunity for all enlisted men and women in the same grade.
- Broaden soldier skills, make assignments more flexible, and provide greater challenge.
- Provide continuing training throughout the soldier's career.¹

The Battalion Training Management System (BTMS) is a formalized set of procedures and materials for managing individual and collective training efforts at the battalion level and below (i.e., at the unit level). Using this system, training managers determine training goals, establish priorities for their accomplishment, and identify support requirements. Subordinate leaders then plan, conduct, evaluate, and record goals, priorities, and their own assessment of collective and individual training needs.²

¹ For a more detailed description of applicable components of the EPMS see FM 7-11B/C/CM, Commander's Manual: MOS 11B/11C Infantryman, 6 February 1979.

² FM 7-11B/C/CM, Commander's Manual: MOS 11B/11C Infantryman, 6 February 1979 contains an excellent summary of the Army Training System.

Four basic components of both the EPMS and the BTMS were determined to be most appropriate for use in developing BSEP II curriculum materials. They are the Soldier's Manuals (SM), the Skill Qualification Tests (SQT), the SQT Notice and Job Site Component (SNJSC), and the SQT Summary Reports. A brief description of each is provided below.³

1. **Soldier's Manual (SM):** A field manual which lists the critical tools for a given skill level in an MOS. It specifies, for each critical task, the conditions under which the task must be performed and the standards which the soldier must attain. It is available to all soldiers within a given MOS, and it serves as the basic guide for all individual training requirements.

In addition to the SMs for specific MOSs, there is a Soldier's Manual of Common Tasks (one for skill level 1 and one for skill levels 2,3, and 4).⁴ These two manuals list critical tasks, with conditions and standards, that are common to all MOSs.

2. **Skill Qualification Test (SQT):** The SQT is a formal, mandatory test that evaluates the soldier's ability to perform selected tasks contained in the SMs. A soldier who fails the SQT is considered unqualified in the MOS and must take the test again in one year. If the soldier fails again, he/she may be reclassified into another MOS or barred from reenlistment. A minimum passing score verifies that a soldier is performing at his/her present skill level. A higher passing score indicates that a soldier is eligible for promotion. There may be three components to the SQT:

- A Skill Component (SC) that tests critical tasks in written

³ All items described are available from the Post/Installation Training Standards Officer (TSO).

⁴ FM 21-2, Soldiers Manual of Common Tasks, Skill Level 1, May 1981, and FM 21-3, Soldiers Manual of Common Tasks, Skill Levels 2, 3, and 4, May 1981.

format (i.e., a pencil and paper test of the multiple choice type).

- A Hands-on-Component (HOC) that formally tests critical tasks as the soldier actually performs them.
 - A Job Site Component (JSC) wherein critical task accomplishment is certified by a supervisor at the job site.
3. The SQT Notice and Job Site Component (SNJSC): The notice is an abbreviated form of the SQT which allows the supervisor and commander to train and evaluate soldiers year round. It is available in the field three months before the beginning of a normal six-month period in which the SQT is to be administered. Each SNJSC contains:
- The SM task number and title that will be tested in each SQT component (i.e., SC, HOC, and JSC).
 - Additional references the soldier needs to study that are not identified in the SM.
 - Descriptions of each task listed in the Skill Component with sample questions and answers.
 - A copy of a score sheet for each task tested in the Hands-on-Component and Job Site Component.
 - Changes to the SM, when appropriate.

An associated document, the SQT Requirements Alert Notice (SRAN), provides soldiers, trainers, and administrators with the specific tasks (by component) six months before the usual six-month test period.

4. **SQT Summary Reports:** The U.S. Army Training Support Center prepares a series of bi-monthly SQT summary reports to provide commanders from company through major command levels (division and corps) with training management information. Summary reports reflect overall performance within the unit by a quintile breakout of total scores and a summary of performance on each task. Figures 1-6 display sample reports for a company, battalion, brigade, division, and corps. Each report includes data from tests scored during the previous 60 days.

BSEP II ENVIRONMENT

The BSEP II Eligible Population

Before proceeding with a more detailed description of how the components of the unit training environment may be used, it is appropriate to describe the approach taken to identify the potential student population (i.e., the pool of BSEP II eligibles at Fort Ord).

The characteristics of the BSEP II-eligible population may vary greatly from installation to installation. Two valuable documents which describe the local situation and assist in understanding local BSEP II needs are: 1) An organization chart of the installation and 2) a local Education Center (EDC) report.

1. **The Organizational Chart.** The Fort Ord Organizational Chart is shown in Figure 7. It shows all the headquarters and units administered at Fort Ord. Most of the BSEP II-eligible personnel are in troop units. On the Fort Ord chart, the majority of these units are shown under ADC (Maneuver) and ADC (Support.) Fort Ord is heavy in infantry and field artillery units. Other types of units are air defense artillery, intelligence, signal (communications), engineers, maintenance, transportation, and military police.
2. **The EDC Report.** Local education centers compile and publish a quarterly Education Center Report. Copies are provided to education

PCN: TAK-052

DATE: 7 AUG 80
TIME: 204042

PAGE 1

-----PERSONAL IN NATURE-----

COMPANY LEVEL SUMMARY REPORT - PART 1

0299 EN BN HHC COMBAT ARMY

AC AA MOS 62B SOT 2 VERS 1 YR 80 UIC: WAOFTO 1 AUG 80)

(THIS REPORT INCLUDES SOLDIERS SCORED BETWEEN 1 JAN 80 AND 1 AUG 80)

QUALIFIED
(MINIMUM 80Z)

VERIFIED
(MINIMUM 60Z)

S.U. S.U. NOT TAKEN/
CO NO-GO EVALUATED S.U.

Z GO

SSN

NAME

TRACK

CONSTRUCTION EQUIPME
CO SH CU RH SM WO

B 250 25
RE 252 86
JB 421 88
JC 429 23
DW 467 27
JW 586 09

16 23 1 41
30 9 1 77
24 15 1 62
16 23 1 41
22 17 1 56
14 25 1 36

X X

--UNIT SUMMARY--

QUALIFIED
100-80Z

VERIFIED
79-60Z

59-40Z

39-20Z

19-0Z

SOLDIERS
TESTED

0
0.0

2
33.3

3
50.0

1
16.7

0
0.0

FIGURE 1: COMPANY LEVEL SUMMARY REPORT - PART 1

PCN: TAX-066

COMPANY LEVEL SUMMARY SQT REPORT-PART 2

ANY LEVEL SUMMARY SQ

PORT-PART 2

Dr.

DATE: 27 JUN 80

PAGE 1

0004 AV CO AVIATION

AC AA MOS 67N SQT 3 VERS 1 YR 79 UIC: WJ1LAA

(THIS REPORT INCLUDES SOLDIERS SCORED BETWEEN 25 APR 80 AND 27 JUN 80)

SUMMARY OF TASK PERFORMANCE

	SOLDIERS TESTED	QUALIFIED 100-80	VERIFIED 79-60	59-40	39-20	19-0
NUMBER	5	1	1	2	1	0
PERCENT	100.0	20.0	20.0	40.0	20.0	0.0

UIC: WAJIAA

100% TASK LISTING, AC AA MOS 67N SQT 3 VERS 1 YR 79

COMPONENT AND TASK NUMBER	S.U.	TRACK	SHORT TITLE	# TESTED	# GO	# NO-GO	NOT TAKEN	% PASS
W551-743-2271	27	0	MAINTAIN PRESERVATN	5	5	0	0	100
W551-743-1198	08	0	INSTALL STABILIZER	5	5	0	0	100
W551-743-2123	15	0	INSTALL MAIN BLADE	5	4	1	0	80
W551-743-3116	16	0	INSPECT SCISSORS	5	3	2	0	60
W551-743-2080	06	0	INSTALL STARTER	5	2	3	0	40

FIGURE 2: COMPANY LEVEL SUMMARY REPORT - PART 2

PCN: TAK-054 BATTALION LEVEL SUMMARY SQT REPORT DATE: 27 JUN 80 PAGE 1
 TAG MICHIGAN P O BOX 210 TIME: 204628
 AC MC MOS 11B SQT 5 VERS 1 YR 78 UIC: MI
 (THIS REPORT INCLUDES SOLDIERS SCORED BETWEEN 25 APR 80 AND 27 JUN 80)

SUMMARY OF TASK PERFORMANCE

NUMBER	SOLDIERS TESTED	QUALIFIED 100-80	VERIFIED 79-60	NOT QUALIFIED		
				59-40	39-20	19-0
5		0	1	4	0	0
PERCENT	100.0	0.0	20.0	80.0	0.0	0.0

UTC: M1 100% TASK LISTING, AC MC MOS 11B SQT 5 VERS 1 YR 78

COMPONENT AND TASK NUMBER	S.U.	TRACK	SHORT TITLE	# TESTED	# CO	# NO-CO	NOT TAKEN	Z PASSED
W071-11A-0806	08	1	ID THREAT VEH WPN	5	5	0	0	100
W071-11B-4508	12	1	PROTECTIVE MINEFIELD	5	4	1	0	80
W071-11B-8562	21	1	REVIEW EER	5	3	2	0	60
W071-11A-1502	07	1	CREEP METH OF ADJ	5	2	3	0	40
W071-11A-0075	01	1	MED AIR EVAC	5	1	4	0	20
W071-11B-8482	23	1	*REVIEW DA2406	5	0	5	0	0

FIGURE 3: BATTALION LEVEL SUMMARY REPORT

AC AA MOS 91B SQT 2 VERS 1 YR 79 UIC: WY3FF
 (THIS REPORT INCLUDES SOLDIERS SCORED BETWEEN 25 APR 80 AND 27 JUN 80)

SUMMARY OF TASK PERFORMANCE

	SOLDIERS TESTED	QUALIFIED 100-80	VERIFIED 79-60	NOT QUALIFIED			
				59-40	39-20	19-0	
NUMBER	18	9	4	3	2	0	
PERCENT	100.0	50.0	22.2	16.6	11.1	0.0	

UIC: WY3FF

1002 TASK LISTING, AC AA MOS 91B SQT 2 VERS 1 YR 79

COMPONENT AND TASK NUMBER	S.U.	TRACK	SHORT TITLE	# TESTED	# GO	# NO-GO	NOT TAKEN	% PASSED
W081-91B-1055	02	0	BLOOD PRESSURE	18	18	0	0	100
W081-91B-1068	25	0	FROSTBITE	18	17	1	0	94
W081-91B-1018	18	0	STOP BLEEDING	18	16	2	0	89
W081-91B-1226	05	0	IRRIGATE AN EAR	18	15	3	0	83
W081-91B-1052	23	0	MORPHINE BY SYRETTE	18	14	4	0	78
W081-91B-1223	03	0	CHANGE STERILE DRESS	18	13	5	0	72
W081-91B-1207	02	0	INTRAVENOUS INFUSION	18	12	6	0	67
W081-91B-1086	28	0	CORROSIVE POISON	18	11	7	0	61
W081-91B-5011	34	0	MAINTAIN DISPOSAL FA	18	8	10	0	44
W081-91B-1241	08	0	INTRADERMAL INJECTIO	18	7	11	0	39
W081-91B-1029	20	0	PATIENT CATEGORIES	18	6	12	0	33
W081-91B-5010	33	0	DISPOSAL FACILITIES	18	3	15	0	17
W081-91B-9005	35	0	LOAD AN M16A1 RIFLE	18	2	16	0	11

FIGURE 4: BRIGADE LEVEL SUMMARY SQT REPORT

SUMMARY OF TASK PERFORMANCE

	SOLDIERS TESTED	QUALIFIED 100-80	VERIFIED 79-60	-NOT QUALIFIED-		
				59-40	39-20	19-0
NUMBER	20	1	1	2	11	5
PERCENT	100.0	5.0	5.0	10.0	55.0	25.0

UIC: WAH4FF

100% TASK LISTING, AC AA		MOS 76W SQT 2		VERS 1 YR 79				
COMPONENT AND TASK NUMBER	S.U.	TRACK	SHORT TITLE	# TESTED	# GO	# NO-GO	NOT TAKEN	% PASSED
W101-519-1154	12	0	OPERATE 350-GPM PUMP	20	16	4	0	80
W101-519-1305	03	0	OPERATE 100-GPM PUMP	19	15	4	1	79
W101-519-1109	08	0	INVENTORY PRODUCTS	20	13	7	0	65
W101-519-1153	11	0	LAY OUT FUEL SYSTEM	20	10	10	0	50
W101-519-2159	33	0	ISSUE PETROLEUM	20	9	11	0	45
W101-519-1155	13	0	OPERATE 350-GPM FLTR	20	8	12	0	40
W101-519-1151	09	0	OPERATE 50-GPM PUMP	20	7	13	0	35
W101-519-1209	21	0	GAGE RAIL TANK CAR	20	6	14	0	30
W101-519-1201	19	0	GAGE STORAGE TANKS	20	5	15	0	25
W101-519-1174	18	0	LOAD SEMITRAILER	20	4	16	0	20
W101-519-1105	06	0	STORE PRODUCTS OUT	20	3	17	0	15
W101-519-1164	16	0	MEASURE TEMP OF FUEL	20	2	18	0	10
W101-519-1213	22	0	SAMPLE BULK PETROL	20	1	19	0	5

FIGURE 5: DIVISION LEVEL SUMMARY SQT REPORT

PCN: TAK-062

CORPS LEVEL SUMMARY SQT REPORT

0007 HQ CPS CORPS

AC AA MOS 94B SQT 2 VERS 1 YR 79 UIC: WAT8FF

(THIS REPORT INCLUDES SOLDIERS SCORED BETWEEN 25 APR 80 AND 27 JUN 80)

DATE: 28 Jun 80

Time: 011657

PAGE 1

SUMMARY OF TASK PERFORMANCE

	SOLDIERS TESTED	QUALIFIED 100-80	VERIFIED 79-60	NOT QUALIFIED		
				59-40	39-20	19-0
NUMBER	10	0	2	5	3	0
PERCENT	100.0	0.0	20.0	50.0	30.0	0.0

100% TASK LISTING, AC AA MOS 94B SQT 2 VERS 1 YR 79									
UTC: WAT8FF	COMPONENT AND TASK NUMBER	S.U.	TRACK	SHORT TITLE	TESTED	# GO	# NO-GO	NOT TAKEN	% PASSED
	C101-524-1152	01	0	COOK MEAT/POULTRY	9	9	0	1	100
	C101-524-1159	03	0	BAKE/FRY PASTRIES	9	9	0	1	100
	W101-524-1157	20	0	COOK SAUCES/GRAVIES	10	9	1	0	90
	W101-524-1253	02	0	IMMERSION HEATER	10	8	2	0	80
	W101-524-1456	32	0	MAINT GRIDDLES	10	6	4	0	60
	W101-524-1153	19	0	COOK VEGETABLES	10	5	5	0	50
	W101-524-1159	22	0	BAKE/FRY PASTRIES	10	4	6	0	40
	W101-524-1205	15	0	STORE PERISHABLES	10	3	7	0	30
	W101-524-1102	09	0	MAINTAIN SAFETY	10	2	8	0	20
	W101-524-1201	13	0	INSPECT SUPPLIES	10	1	9	0	10

FIGURE 6: CORPS LEVEL SUMMARY SQT REPORT

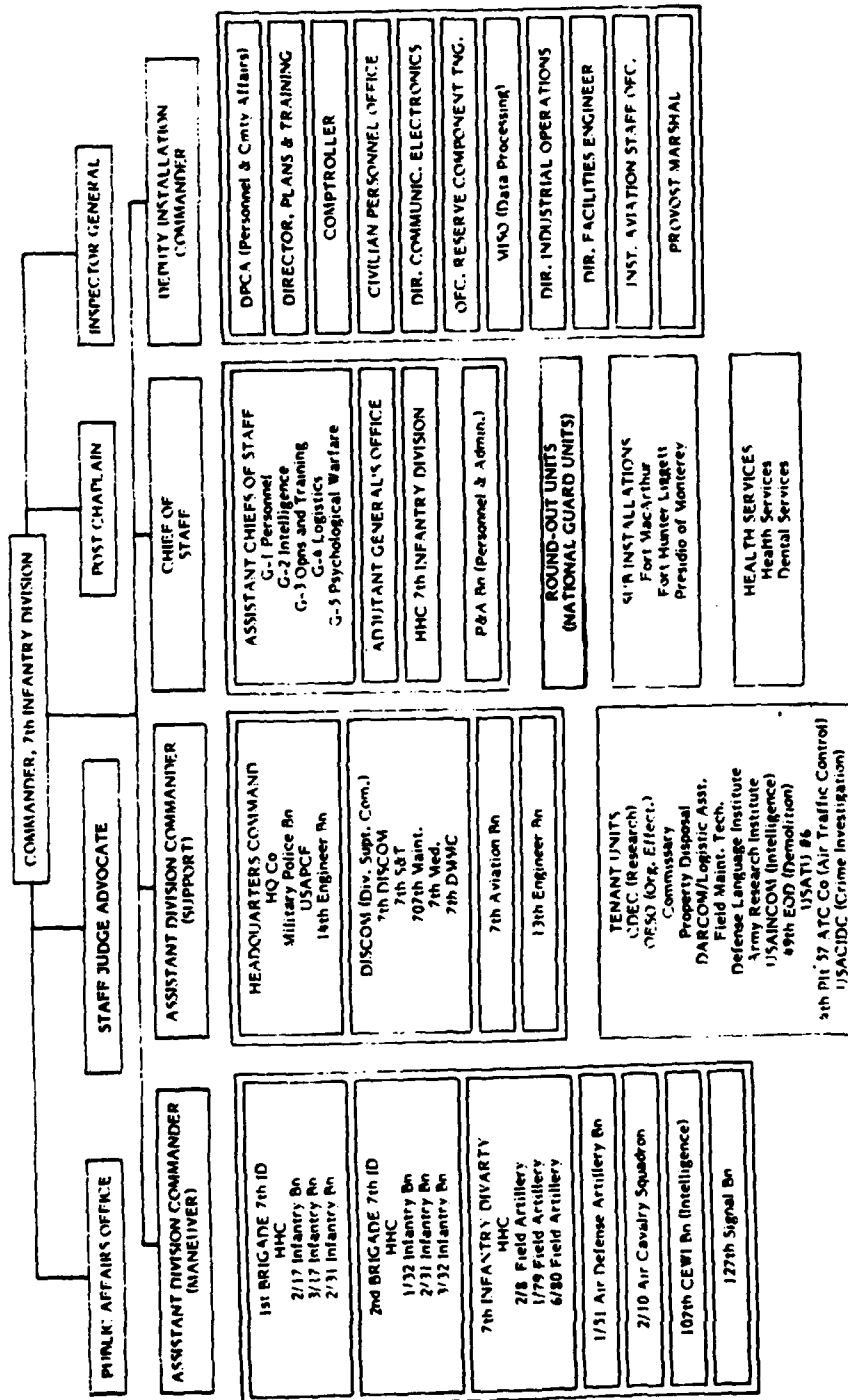


FIGURE 7: ORGANIZATIONAL CHART FOR FORT ORD

center counselors and to all troop unit commanders at the company, troop, or battery level. A page from a sample EDC report from Fort Ord appears as Figure 8. Individual and unit identifications have been left out on the sample. The printout lists all enlisted personnel at the installation and its attached facilities who:

- a. have a GT score of less than 90, or
- b. do not have either a high school diploma or a GED certificate, or
- c. failed to verify their MOS on their most recent SQT.

These individuals are the ones who are most likely to need basic skills training. They are listed alphabetically by unit. The report identifies grade, GT score, educational level, arrival date, previous SQT performance (when such information is available), and MOS for each individual⁵.

For determining BSEP II program requirements, the most important EDC variable is MOS. A frequency count of MOSs, performed on the Fort Ord EDC roster for 16 November 1981, yielded the data presented in Table 1. The top portion of the table lists all MOSs with a density of over 100 on the EDC roster. Sixty percent of the entire Fort Ord population are in only 6.3% (12) of the MOSs. The bottom portion of the table lists the major job clusters.⁶ The combat job cluster accounts for over 44% of all BSEP II-eligibles at Fort Ord.

This information, combined with the information gathered from the organization chart, provides a finer focus on job material that might profitably be included in

⁵ The SQT and MOS information is not a part of the Army approved EDC report format. It was added to the Fort Ord EDC report at the request of the project team.

⁶ This grouping of job clusters is consistent with those identified by Sticht, Thomas G. A Program of Army Functional Job Training: Development, Implementation, and Delivery System. HumRRO Report FR-WD(CA)-75-7, June 1975.

UNIT: 0007 IN DIV			DIV		UPC:		
NAME	GRD	SSAN	GT	CIV	NHS	HS	ARR
				ED	GRD	GRD	DATE
	SP5	36960	109	C	X		800603 94B20
	SP4	53178	096	C	X		810406 V 11B10
	CPL	26353	076	E		X	820114 11B10
	PFC	10560	078	E		X	810428 94B10
	SP4	21392	088	B	X		811203 91B10
	PFC	27758	082	E		X	810327 94B10
	SFC	56282	085	F		X	810302 F 57H4X
	SSG	58605	110	F		X	811102 F 64C30
	SP5	44852	110	E		X	811101 F 71C20
	SP4	39082	130	C	X		800222 71R10
	SP5	43774	112	J		X	810513 F 64C20
	SP4	36156	094	E		X	810417 F 71D10
	SP5	45796	120	E		X	800314 F 71L20
	SP4	27266	099	B	X		800603 94B10
	PFC	26177	118	B	X		801215 11B10
	SP4	54731	099	A	X		810924 Q 11B10
	PV2	24623	082	E		X	811119 63B10
	SP5	27738	128	E		X	810112 F 71N20

FIGURE 8: SAMPLE OF EDC ROSTER, FORT ORD, NOVEMBER 1981

TABLE 1: ANALYSIS OF FORT ORD EDC REPORT, NOVEMBER, 1981

MOS	TITLE	FREQUENCY	CUM. FREQUENCY	% OF 5637	CUM.% OF 5637
11B	Infantryman	1083	1083	19.21	19.21
13B	Cannon Crewman	320	1403	5.68	24.89
64C	Motor Transport Operator	307	1710	5.45	30.34
63B	Lt. Wheel Vehicle Mechanic	287	1997	5.09	35.43
12B	Combat Engineer	253	2250	4.49	39.91
94B	Food Service Specialist	238	2488	4.22	44.14
11C	Indirect Fire Infantry	192	2680	3.41	47.54
36K	Field Wireman	166	2846	2.94	50.49
11H	Heavy Anti-armor Crewman	153	2999	2.71	53.20
91B	Medical Specialist	146	3145	2.59	55.79
76Y	Unit Supply Specialist	130	3275	2.31	58.10
71L	Administrative Specialist	106	3381	1.88	59.98

MOSs WITH A DENSITY OF OVER 100 INDIVIDUALS ON FORT ORD EDC ROSTER,
NOVEMBER 1981

MOS Job Cluster	N	% of 5,637 (total N)	83.7% of personnel in these job clusters
Combat	2,505	44.4	
Clerical/Supply	693	12.3	
Vehicle Operator/Mechanic	594	10.5	
Communications	403	7.1	
Cook	249	4.4	
Medic	223	5.0	
Other job clusters	1,067	16.3	

BSEP II lessons for the Fort Ord population. A list of relevant job clusters for Fort Ord is shown in Table 2.

Identification of Basic Literacy Skill Subjects

As a first effort to determine the specific subject matter content for the basic literacy skill curriculum, the project team conducted a detailed analysis of the TABE. Since the Army has dictated that the TABE be used to identify the BSEP II eligible population and to serve as the posttest measure of basic literacy skill gains, such an analysis is essential to the development of an appropriate curriculum. (The suitability and effectiveness of the TABE for this purpose is a subject that is beyond the scope of this research project.) A summary of the types of information obtained from the analysis of the TABE is shown in Table 3. Specific subject matter items tested include components of basic language, math and reading skill requirements contained in most adult literacy programs. The curriculum modules designed to address each of these skill requirements are shown in Figure 9 and Table 4.

Identification of Life Coping Skills Material

A recent HumRRO study of coping and adaptation by soldiers in Europe served as a model for collecting data pertinent to the development of a Life Coping Skills curriculum.⁷

After eliminating USAREUR-specific content, a revised survey of life role demands was administered at Fort Ord to 13 enlistees enrolled in the Basic Non-commissioned Officer Course (BNCOC), 30 personnel in the Primary Leadership Course (PLC), and 28 students in the BSEP II course. Mean ratings of importance and perceived ability for each of a series of 55 life demands are presented for the three Fort Ord populations. Importance was rated on a five-point scale

⁷ Dawson, R., McGuire, W.J., Brooks, M.K., and Hebein, J.M. An Investigation of Coping and Adaptation in USAREUR: Criteria of Adaptation, Life Role Demands Faced by First Term Enlistees, and Services Provided by USAREUR Agencies. HumRRO, September 1981.

TABLE 2: JOB CLUSTERS RELEVANT TO THE MAJORITY OF BSEP ELIGIBLES AT FORT ORD

JOB CLUSTER	% (from EDC Report)	(From Organization Chart)
1. Combat Arms		
a. Infantry 11B and 11C	22.62	Bns: 2/17, 3/17, 2/31, 1/32, 2/32, 3/32
b. Artillery 13B and 11H	8.39	Bns: 2/8, 1/79, 6/80
c. Engineers 12B	4.49	Bns: 14th Engr, 13th Engr
d. Other Combat MOSs	8.90	Scattered
<hr/>		
TOTAL COMBAT ARMS MOSs	44.40%	
2. Combat Support		
a. Clerical/Supply 76Y and 76L	4.19	Scattered in HQs
Other Clerical Supply MOSs	8.11	
b. Vehicle Operator/Mech 64C and 63B	10.54	Scattered in HQs
c. Communications 36K	2.94	127th Signal Bn
Other Communications MOSs	4.16	
d. Cooks 94B	4.22	Scattered in HQs
Other Cook MOSs	0.18	
e. Medics 91B	2.59	7th Medical
Other Medic MOSs	2.41	
<hr/>		
TOTAL COMBAT SUPPORT MOSs	39.34%	
<hr/>		
TOTAL IN MAJOR JOB CLUSTERS	83.74%	

TABLE 3: TABE ANALYSIS

TABE--KNOWLEDGE AREAS

READING

- VOCABULARY
- SPELLING
- READING COMPREHENSION
LOCATORS, CHARTS & TABLES
COMPREHENSION & RETENTION

LANGUAGE

- CAPITALIZATION
- PUNCTUATION
- EXPRESSION

MATH

- WHOLE NUMBERS
(+, -, x, ÷)
- FRACTIONS
- CONCEPTS
- STORY PROBLEMS

TABE--FORMAT AND TEST SKILLS

- MULTIPLE-CHOICE QUESTIONS
- COMPLEX DIRECTIONS
 - Counting Words
 - Determine "Closest" Word
 - Inference From Text
 - Double Answer Requirements,
Missing Punctuation and Location
- WORKING AGAINST TIME

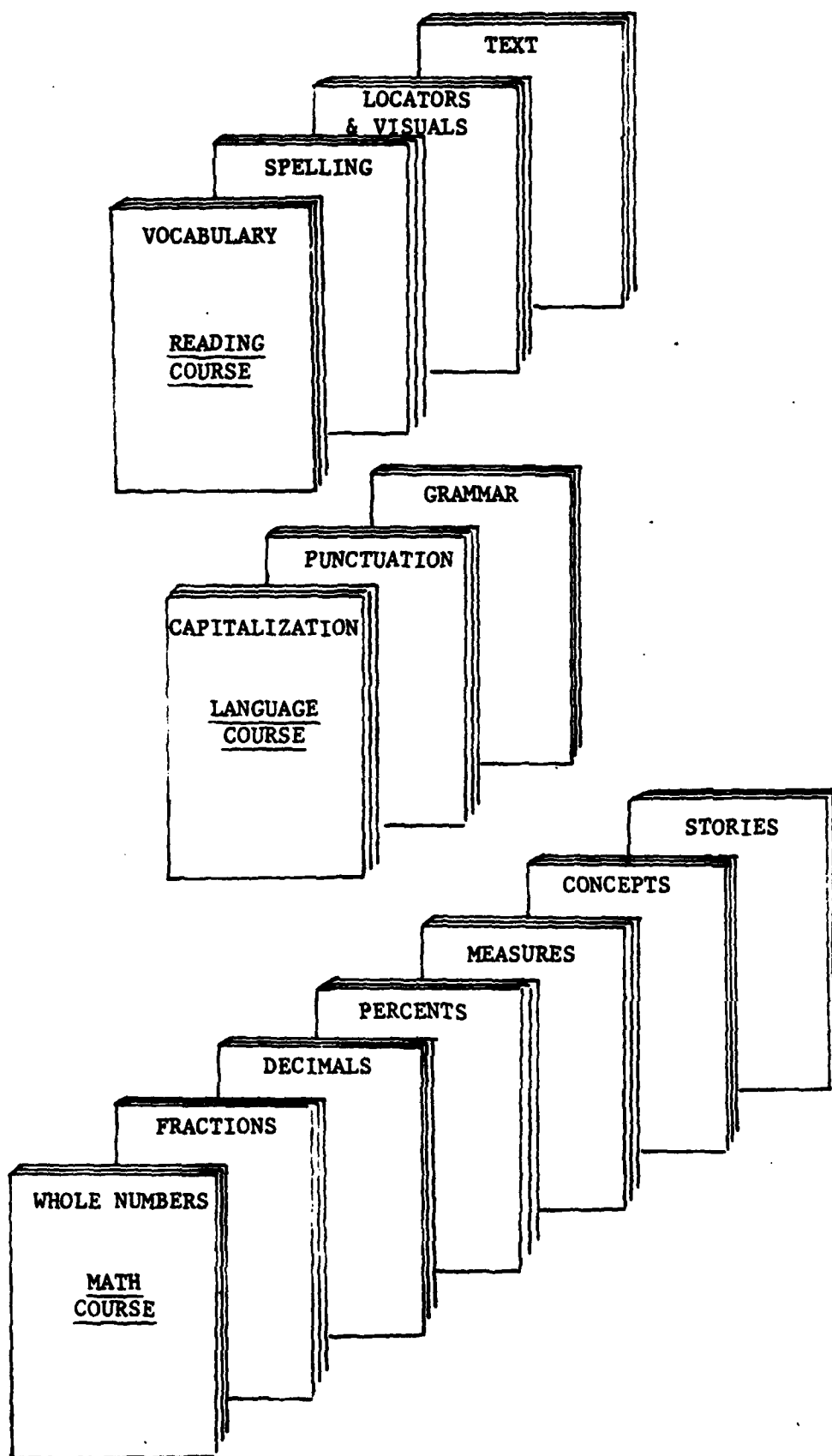


FIGURE 9: LITERACY SKILLS CURRICULUM

TABLE 4: CONTENTS OF LITERACY SKILL CURRICULUM MODULES

READING COURSE	
<u>Module</u>	<u>Contents of Module</u>
Vocabulary	Meaning from Context Meaning from Related Words Synonyms Common Nonmilitary Words Common Military Words Special Military Words
Spelling	Phonetic Spelling ie-ei Rule Silent Letters Compound Words Double Letters Adding Endings Forming Plurals Changing Tense Commonly Misspelled Words
Locators and Visuals	Table of Contents Index Tables Bar graphs Line graphs Pie graphs Meters and Dials
Text	Procedural Directions Fact from Text Inference from Text Restatement

TABLE 4: (Continued)

LANGUAGE COURSE	
<u>Module</u>	<u>Contents of Module</u>
Capitalization	Initial Capitals Proper Names and Proper Nouns Days, Months, and Holidays Special Groups, Events, Religions, and Races Languages and Specific Courses Honorifics Book and Magazine Titles
Punctuation	End Punctuation Commas: Series Appositives Direct Address Introductory Words, Parenthetical Expressions Dates Addresses Phrases, Clauses Quotation Marks Apostrophes: Ownership Pronouns Contractions Abbreviations
Grammar	Subjects Verbs Number Tenses Subject-Verb Agreement Tense Agreement Action and Linking Verbs Helping Verbs Adjectives Adverbs Antecedents Pronouns Prepositions Comparisons Word Choice Fragments Run-Ons Standard English Usage

TABLE 4: (Continued)

MATH COURSE	
<u>Module</u>	<u>Contents of Module</u>
Whole Numbers	Introduction to Numbers Addition: One-Digit Numbers Two-Digit Numbers Carrying Three-Digit Numbers Mixed Addition Subtraction: One-Digit Numbers Two Digits from Two Digits Borrowing Two-Digit Numbers Three-Digit Numbers Mixed Subtraction Checking Subtraction by Adding Multiplication: One-Digit Numbers One Digit times Two Digits Carrying Two-Digit Numbers Three-Digit Numbers Division: Dividing and Multiplying are Related One Digit into Two - Even One Digit into Two - Remainder Writing Remainders Two Digits into Three Three Digits into Four Changing from $+$ to \div
Fractions	What is a Fraction? Types of Fractions Reducing Fractions Mixed Numbers and Fractions Finding Common Denominators Cancelling Adding: Common Denominators Different Denominators Mixed Numbers Multiplying: Wholes Times Fractions Fractions Times Fractions Mixed Numbers Fractions Times Decimals

TABLE 4: (Continued)

MATH COURSE (Continued)	
<u>Module</u>	<u>Contents of Module</u>
Fractions (Continued)	Subtracting: Common Denominators Different Denominators Mixed Numbers Dividing: Fractions by Wholes Wholes by Fractions Fractions by Fractions Mixed Numbers
Decimals	Names of Decimal Places and Fractional Equivalents Adding: Decimals and Decimals Wholes and Decimals Decimals and Decimals Mixed Numbers Subtracting: Decimals from Decimals Wholes and Decimals Decimals and Decimals Mixed Numbers Multiplying: Decimals from Decimals Wholes and Decimals Decimals and Decimals Mixed Numbers Dividing: Decimals from Decimals Wholes and Decimals Decimals and Decimals Mixed Numbers
Percents	What are Percents? Percents and Fractions Finding Percents of Numbers Adding and Subtracting Percents Multiplying Percents Dividing Percents Percents and Decimals

TABLE 4: (Continued)

MATH COURSE (Continued)	
<u>Module</u>	<u>Contents of Module</u>
Measures	Dollars and Cents Yards, Feet, Inches Meters and Centimeters Years and Months, Hours and Minutes (Units of Time) Gallons, Quarts, Pints, and Cups
Concepts	Mathematical Symbols Commutation Geometric Shapes Roman Numbers Length and Perimeters
Story Problems	Key Words Ordering Operations Addition Story Problems Subtraction Story Problems Multiplication Story Problems Division Story Problems Any 2 Operations Any 3 Operations Problems with Percents Problems with Measures Problems with Fractions Mixed Story Problems

from 1 = Not at all important to 5 = Extremely important. Ability was rated on a five-point scale from 1 = Not at all able to perform to 5 = Extremely well able to perform (Table 5). Mean importance and ability ratings for all 55 demands together are shown in Table 6 for the three survey populations.

BSEP II students rated the overall soldier population as being more able to perform the demands listed on the survey than did the BNCOC or PLC respondents.

Of the demands listed on the survey, a large majority of them were rated as being of average to high importance (Quite Important or higher) and of low soldier ability to perform (Moderately Well Able to Perform or lower) on both the BNCOC and the PLC surveys, (Table 6). Of the demands, 70.9% fell into this category for BNCOC; 81.9% of the demands fell into this category for PLC. Only 18 demands, or 32.7%, fell into the same category for BSEP II respondents.

In Table 7, thirty-eight or 69.1%, of the demands are quite important - yet soldiers were rated as not being able to do them at least moderately well on both the BNCOC and the PLC surveys. These 38 demands are listed in Table 8. Fourteen of these demands also appear in the same high importance - low ability category for the BSEP II survey. Nine of the demands have particularly low ability ratings from BNCOC and PLC.

From Table 8, eighteen demands have been selected which either:

- (a) are ranked high in importance and low in ability by all three groups surveyed, or
- (b) have a particularly low ability rating from both BNCOC and PLC respondents.

These seventeen demands appear in Table 9. It is this list of demands which was the primary source for selecting life coping tasks for the life coping skills modules shown in Table 10.

**TABLE 5: MEAN IMPORTANCE AND ABILITY RATINGS
FOR LIFE DEMANDS: BNCOC, PLC, AND BSEP* RESPONDENTS**

Importance				Ability		
\bar{X} Rating				\bar{X} Rating		
BNCOC	PLC	BSEP	Life Role Demand	BNCOC	PLC	BSEP
4.077	4.367	4.538	1. Make a budget.	2.000	2.333	2.821
4.231	4.467	4.346	2. Choose an educational program which will help you to advance in your Army career.	1.538	2.621	3.000
4.308	4.667	4.593	3. Read, write, and compute at a basic literacy level.	2.538	2.667	3.000
4.615	4.733	4.593	4. Perform job tasks adequately.	2.750	3.267	3.160
4.308	4.586	4.444	5. Save money.	2.077	2.138	2.280
4.500	4.483	4.269	6. Pass SQT/perform SQT tasks.	3.230	3.033	3.375
4.154	4.567	4.231	7. Follow security regulations (telephone, etc.).	2.308	2.267	3.000
3.154	4.034	3.583	8. Use banking facilities for deposit/withdrawal.	2.385	2.733	3.370
3.308	4.103	3.889	9. Use good study skills, including finding a good place to study.	2.385	2.667	2.960
4.000	4.567	4.370	10. Keep a balanced checking account.	2.154	2.433	3.000
4.154	4.533	4.519	11. Develop career goals, both short and long term.	2.692	2.533	3.192
4.769	4.533	4.519	12. Know how to get help if you feel your rights within the Army system have been violated.	2.846	2.500	3.037

* No. of Respondents:

BNCOC = 13

PLC = 30

BSEP = 28

TABLE 5: Continued

Importance				Ability		
\bar{X} Rating				\bar{X} Rating		
BNCOC	PLC	BSEP	Life Role Demand	BNCOC	PLC	BSEP
3.846	4.033	4.115	13. Organize your personal time so you can plan travel or recreation without conflicting with field duty requirements, alerts, shifts, etc.	2.769	2.667	2.893
4.000	4.433	4.308	14. Know how important SQT and other Army tests are for career advancement, and give your best effort on tests.	2.923	2.800	3.222
4.615	4.867	4.730	15. Pay bills on time	2.769	2.733	3.240
4.000	4.333	4.333	16. Remember and apply knowledge and skills which you have learned, and use them in new situations.	2.692	2.933	3.364
4.385	4.276	4.154	17. Follow military dress code.	2.769	2.467	3.375
4.615	4.733	4.636	18. Understand the legal consequences of signing a contract.	2.385	2.400	3.292
3.692	4.233	3.808	19. Take notes effectively.	2.615	2.448	2.960
4.000	4.533	4.333	20. Apply basic health rules to keep from getting sick.	3.000	3.200	3.227
4.538	4.567	4.720	21. Know your personal rights and responsibilities under the Uniform Code of Military Justice.	2.231	2.833	2.840
3.692	4.300	4.120	22. Find materials and resources which will help you learn (such as the library learning center, and resource people).	2.308	2.786	2.542
4.154	4.433	3.962	23. Exhibit proper military bearing (that is, act professional).	2.615	2.333	2.833

TABLE 5: Continued

Importance				Ability		
\bar{X} Rating				\bar{X} Rating		
BNCOC	PLC	BSEP	Life Role Demand	BNCOC	PLC	BSEP
4.154	4.433	4.577	24. Find out where to get accurate information about educational opportunities, services, and benefits.	2.615	2.433	3.250
4.077	4.433	4.160	25. Communicate well with superiors.	2.231	2.310	2.704
4.231	4.345	4.346	26. Take care of family needs and goals without neglecting your military duties and goals (such as night shifts and field duty).	2.615	2.759	3.261
4.462	4.433	4.440	27. Use Army leadership skills to manage troops.	2.846	2.556	3.125
4.538	4.667	4.560	28. Obey military and civilian laws.	2.462	2.966	3.333
4.385	4.483	4.333	29. Maintain proper weight and level of physical fitness.	3.308	2.667	3.348
4.077	4.379	4.417	30. Keep records for income tax filing.	2.538	2.600	2.917
3.846	3.833	3.750	31. Find Army career information.	2.846	2.586	2.583
4.154	4.379	4.304	32. Know individual rights within the Army assignment system.	2.385	2.655	2.913
4.385	4.533	4.458	33. File income tax report correctly and on time.	2.538	3.138	2.913
3.923	4.667	4.360	34. Know how to plan and conduct a permanent change of station(PCS).	3.000	2.586	3.435
4.000	4.333	4.167	35. Adjust to classes and learning situations which are different from the schools you used to attend.	2.538	2.700	3.000
4.615	4.667	4.480	36. Complete requirements for promotion.	3.077	2.867	3.348

TABLE 5: Continued

Importance				Ability		
\bar{X} Rating				\bar{X} Rating		
BNCOC	PLC	BSEP	Life Role Demand	BNCOC	PLC	BSEP
5.077	4.200	4.083	37. Take advantage of alternate, non-traditional educational programs (such as correspondence, external degrees, CLEP, and independent learning).	2.615	2.500	2.917
3.923	4.200	3.960	38. Make the best use of educational opportunities without interfering with mission priorities.	2.615	2.433	2.783
4.231	4.467	4.120	39. Start and maintain good work relationships with your peers.	3.077	2.633	3.000
4.462.	4.300	4.304	40. Know what Army agencies exist to help you deal with your emotional needs and problems.	2.385	2.448	2.917
4.154	4.033	3.400	41. Effectively use individual and unit training opportunities.	2.308	2.800	2.826
4.231	3.833	3.875	42. Use postal services effectively.	3.426	3.200	2.958
4.000	4.233	4.000	43. Know how to plan and conduct TDY.	2.385	2.733	2.875
4.308	4.400	4.217	44. Conserve energy at home or work.	2.769	2.433	2.958
3.692	4.133	4.217	45. Obey military barracks rules and regulations.	2.462	2.200	2.762
3.846	4.033	4.045	46. Find and use materials for independent training (MOS libraries, correspondence courses, learning resource centers).	2.154	2.633	3.000
4.462	4.400	4.384	47. Know what assistance is available through JAG legal services.	2.692	2.500	2.625

TABLE 5: Continued

Importance				Ability		
\bar{X} Rating				\bar{X} Rating		
BNCOC	PLC	BSEP	Life Role Demand	BNCOC	PLC	BSEP
4.692	4.552	4.478	48. Know where to get help to deal effectively with personal and family crises.	2.462	2.655	3.083
4.077	4.067	4.208	49. Learn how to estimate time and distance for travel.	2.231	2.690	3.304
4.231	4.500	4.478	50. Know the role of education in promotion and advancement.	2.846	2.867	3.292
4.000	4.367	4.167	51. Use learning skills such as information gathering, problem solving, and how to organize, analyze, and evaluate data.	2.538	2.724	2.870
4.077	4.448	4.125	52. Make choices about drug or alcohol use based on legal and health consequences.	1.769	2.400	2.739
4.385	4.448	4.167	53. Know how your job fits into the Army mission.	2.538	2.700	3.130
4.077	4.333	4.522	54. Use the chain of command.	2.308	2.500	3.250
4.385	4.586	4.250	55. Successfully introduce your family to Army community and to Army life, to give them a sense of understanding and "belonging."	2.308	2.367	2.913

TABLE 6: MEAN IMPORTANCE AND ABILITY RATINGS FOR LIFE ROLE DEMANDS

	\bar{X} Importance Rating	\bar{X} Ability Rating
BNCOC N = 13	X 4.169 SD 0.320	X 2.562 SD 0.356
PLC N = 30	X 4.392 SD 0.222	X 2.637 SD 0.249
BSEP N = 28	X 4.262 SD 0.273	X 3.026 SD 0.247

TABLE 7: MATRIX OF AVERAGE RATINGS FOR DEMANDS BY GROUP
(B=BSEP, N=BNCOC, P=PLC)

Demand	Quite to Extremely Important			Moderately to Quite Important	
	Moderately to Quite Well Able to Do	Somewhat to Moderately Well Able to Do		Moderately to Quite Well Able to Do	Somewhat to Moderately Well Able to Do
		Less than Somewhat Well Able to Do			
1		NBP			
2	B	P	N		
3	B	NP			
4	BP	N			
5		NBP			
6	NBP				
7	B	NP			
8		P		B	N
9		P			BN
10	B	NP			
11	B	NP			
12	B	NP			
13		BP			N
14	B	NP			
15	B	NP			
16	B	NP			
17	B	NP			
18	B	NP			
19		P			BN
20	NBP				
21		NBP			
22		BP			N
23		NP			B
24	B	NP			
25		NBP			
26	B	NP			
27	B	NP			
28	B	NP			

Demand	Quite to Extremely Important			Moderately to Quite Important	
	Moderately to Quite Well Able to Do	Somewhat to Moderately Well Able to Do		Moderately to Quite Well Able to Do	Somewhat to Moderately Well Able to Do
		Less than Somewhat Well Able to Do			
29	BN	P			
30		NBP			
31					NBP
32		NBP			
33	P	BN			
34	B	P		N	
35	B	NP			
36	BN	P			
37		NBP			
38		P			BN
39	BN	P			
40		NBP			
41		NP			B
42	N			P	B
43		NBP			
44		NBP			
45		NBP			
46	B	P			N
47		NBP			
48	B	NP			
49	B	NP			
50	B	NP			
51		NBP			
52		BP	N		
53	B	NP			
54	B	NP			
55		NBP			

TABLE 8: HIGH IMPORTANCE-LOW ABILITY DEMANDS

Demands Listed on both BNCOC and PLC Surveys as having a Mean Importance of at Least 4.0 (Quite Important) and a Mean Ability Level of Less than 3.0 (Moderately Well Able to Do):

- +* 1. Make a budget.**
- 2. Choose an educational program which will help you to advance in your Army career.**
- 3. Read, write, and compute at a basic literacy level.**
- +* 5. Save money.**
- * 7. Follow security regulations (telephone, etc.).**
- * 10. Keep a balanced checking account.**
- 11. Develop career goals, both short and long term.**
- 12. Know how to get help if you feel your rights within the Army system have been violated.**
- 14. Know how important SQT and other Army tests are for career advancement, and give your best effort on tests.**
- 15. Pay bills on time.**
- 16. Remember and apply knowledge and skills which you have learned, and use them in new situations.**
- 17. Follow military dress code.**
- * 18. Understand the legal consequences of signing a contract.**
- + 21. Know your personal rights and responsibilities under the Uniform Code of Military Justice.**
- 23. Exhibit proper military bearing (that is, act professional).**
- 24. Find out where to get accurate information about educational opportunities, services, and benefits.**
- +* 25. Communicate well with superiors.**
- 26. Take care of family needs and goals without neglecting military duties and goals (such as night shifts and field duty).**
- 27. Use Army leadership skills to manage troops.**
- 28. Obey military and civilian laws.**

TABLE 8: (Continued)

- + 30. Keep records for income tax filing.
- + 32. Know individual rights within the Army assignment system.
- 35. Adjust to classes and learning situations which are different from schools you used to attend.
- + 37. Take advantage of alternate, non-traditional educational programs (such as correspondence, external degrees, CLEP, and independent learning).
- +* 40. Know what Army agencies exist to help you deal with emotional needs and problems.
- 41. Effectively use individual and unit training opportunities.
- + 43. Know how to plan and conduct TDY.
- + 44. Conserve energy at home or work and on the road.
- + 45. Obey military barracks rules and regulations.
- + 47. Know what assistance is available through JAG legal services.
- 48. Know where to get help to deal effectively with personal and family crises.
- 49. Learn how to estimate time and distance for travel.
- 50. Know the role of education in information gathering, problem solving, and how to organize, analyze, and evaluate data.
- + 51. Use learning skills such as information gathering, problem solving, and how to organize, analyze, and evaluate data.
- +* 52. Make choices about drug or alcohol use based on legal and health consequences.
- 53. Know how your job fits into the Army mission.
- 54. Use the chain of command.
- * 55. Successfully introduce your family to the Army community and to Army life, to give them a sense of understanding and "belonging."

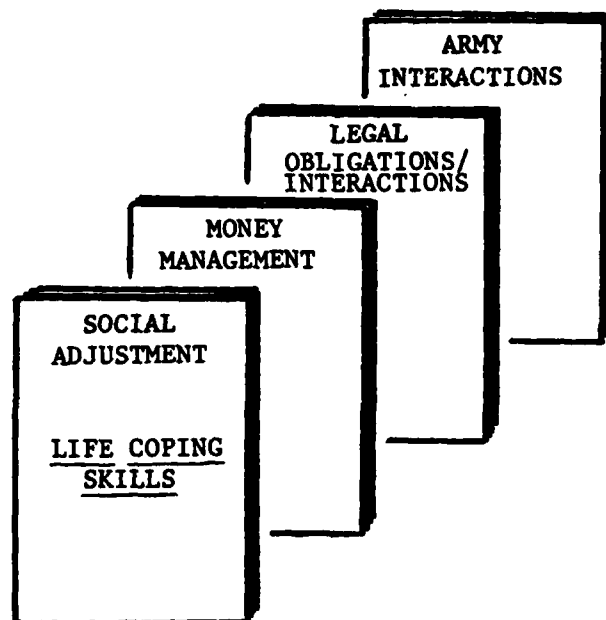
* Demands which were rated Quite to Extremely Important (4.0 - 5.0) and with an ability rating of 2.5 or less (where 3.0 = Moderate Ability and 2.0 = Somewhat Well Able).

+ Demands which were also rated Quite to Extremely Important (4.0 - 5.0) and Less than Moderately Well Able to Do (3.0 or less) by BSEP respondents.

TABLE 9: DEMANDS TARGETED FOR EMBEDDING IN BSEP MATERIALS

1. Make a budget.
5. Save money.
7. Follow security regulations (telephone, etc.).
10. Keep a balanced checking account.
18. Understand the legal consequences of signing a contract.
21. Know your personal rights and responsibilities under the Uniform Code of Military Justice.
25. Communicate well with superiors.
30. Keep records for income tax filing.
32. Know individual rights within the Army assignment system.
37. Take advantage of alternate, non-traditional educational programs (such as correspondence, external degrees, CLEP, and independent learning).
40. Know what Army agencies exist to help you deal with emotional needs and problems.
43. Know how to plan and conduct TDY.
44. Conserve energy at home or work and on the road.
45. Obey military barracks rules and regulations.
47. Know what assistance is available through JAG legal services.
51. Use learning skills such as information gathering, problem solving, and how to organize, analyze, and evaluate data.
52. Make choices about drug or alcohol use based on legal and health consequences.
55. Successfully introduce your family to the Army community and to Army life, to give them a sense of understanding and "belonging."

TABLE 10: LIFE COPING SKILLS



LIFE COPING SKILLS COURSE	
<u>Module</u>	<u>Contents of Module</u>
Social Adjustment	<ol style="list-style-type: none"> 1. Know what Army agencies exist to help you deal with emotional needs and problems 2. Make choices about drug or alcohol use based on legal and health consequences 3. Successfully introduce your family to the Army community and Army life to give them a sense of understanding and "belonging"
Money Management	<ol style="list-style-type: none"> 1. Make a budget 2. Save money 3. Keep a balanced checking account
Money Management/Legal	<ol style="list-style-type: none"> 1. Understand the legal consequences of signing a contract
Legal Obligations, Regulations	<ol style="list-style-type: none"> 1. Follow security regulations (telephone, etc.)
Army Interactions	<ol style="list-style-type: none"> 1. Communicate well with superiors

Selection of the Learning Strategy Course

An excellent treatment of learning strategies research and its potential for application in the Army by Cavert, et. al.,⁸ led the project team members to review closely the work of Dansereau,⁹ Dobrovolny,¹⁰ Ratliff,¹¹ and Weinstein.¹² The Study Skills Package developed by Dobrovolny, McCombs, and Judd was selected as a basic model for adaptation for the following reasons:

- The package was tested successfully with a group of enlisted members of the Air Force who closely resembled the Army. BSEP II population.
- The package was developed as a self-paced, adjunct curriculum.
- Content was job related and led easily to adaptation to the Army setting.
- The package incorporated many of the ideas, concepts, and examples from the works of Dansereau and Weinstein.

⁸ Cavert C., Jones B.F., Shtogren, J.A., Wager, W., Weinstein, C., and Whitmore, P. Requirements and Recommendations for Learning Strategies in the U.S. Army Basic Skills Education Program. November 30, 1980.

⁹ Dansereau, Donald F. Systematic Training Program for Enhancing Learning Strategies and Skills: Further Development. September 1978. AFHRL-TR-78-63.

¹⁰ Dobrovolny, J.L., McCombs, B.L., and Judd, W.A. Study Skills Package: Development and Evaluation. March 1980.

¹¹ Ratliff, R., Earles, J.A., Ratliff, J.D., and Wissman D. A Comparison of Verbal and Visual Imagery Learning: Their Importance for Instructional Technology. December 1978.

¹² Weinstein, C. "Learning Strategies: The Metacurriculum." Journal of Developmental and Remedial Education, Volume 5, Number 2, Winter 1982.

The Dobrovoly Study Skills Package was rewritten to reflect language and job related examples appropriate to the Army BSEP II population and to reduce somewhat the level of reading proficiency required for its use. Because of the rather severe time limitations involved in the conduct of BSEP II classes at Fort Ord (only 40 hours maximum for the language/reading component), the adjunct, or independent study, design was maintained. Approximately 50% of the original "test-wiseness" module was eliminated because it was considered to be less relevant to and too complex for the BSEP II student. The modules, with a brief description of their contents, are shown in Table 11. The complete curriculum is contained in ARI Research Note 83-36.

INTEGRATING STRATEGIES

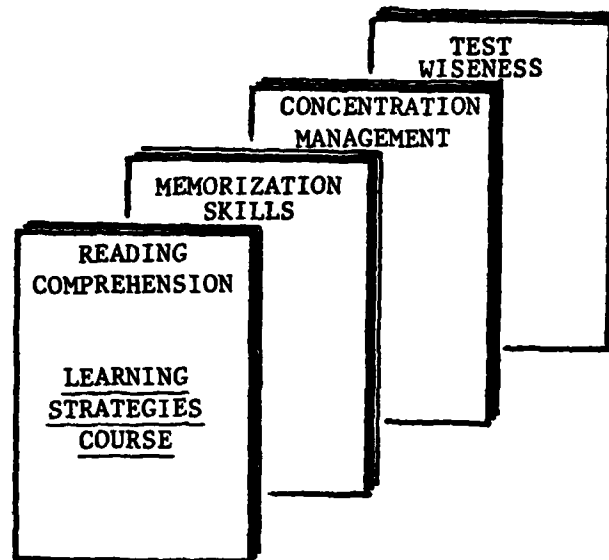
Selection of Soldier Training Material

To insure maximum integration of relevant soldier material into the experimental BSEP II curriculum, the steps outlined in Figure 10 were established to guide the development of individual lesson modules. With a continuing focus on Department of Army-established outcomes for BSEP II, relevant soldier material was examined to identify material suitable for incorporation into lessons. FM 21-2 and FM 21-3 served as the basic references for identifying applicable soldier tasks that are common to all MOSs feeding into BSEP II. A task categorization checklist of the type shown at Figure 11 was used to determine the potential application of the specific task material to a BSEP II lesson.

HQ TRADOC has dictated that every soldier in the Army be tested on those common tasks listed in Table 12.¹³ Portions of all such tasks were incorporated into individual BSEP II lessons. This is one example of how current Army-identified needs have been used to identify lesson material for the experimental curriculum.

¹³-----
As indicated in SQT Notices.

TABLE 11: LEARNING STRATEGIES



LEARNING STRATEGIES COURSE	
<u>Module</u>	<u>Contents of Module</u>
Reading Comprehension	<ol style="list-style-type: none"> 1. Questioning Method of Study 2. Network Method of Study 3. Problem Solving Method of Study
Memorization	<ol style="list-style-type: none"> 1. Elaboration 2. Mental Pictures 3. Grouping
Concentration Management	<ol style="list-style-type: none"> 1. Setting Proper Mood 2. Relaxation 3. Positive Self-Talk
Test Wiseness	<ol style="list-style-type: none"> 1. Time Management 2. Appropriate Guessing 3. Careful Reading
Study Skills Questionnaire	<ol style="list-style-type: none"> 1. Reading Comprehension 2. Memorization 3. Concentration Management 4. Test Wiseness

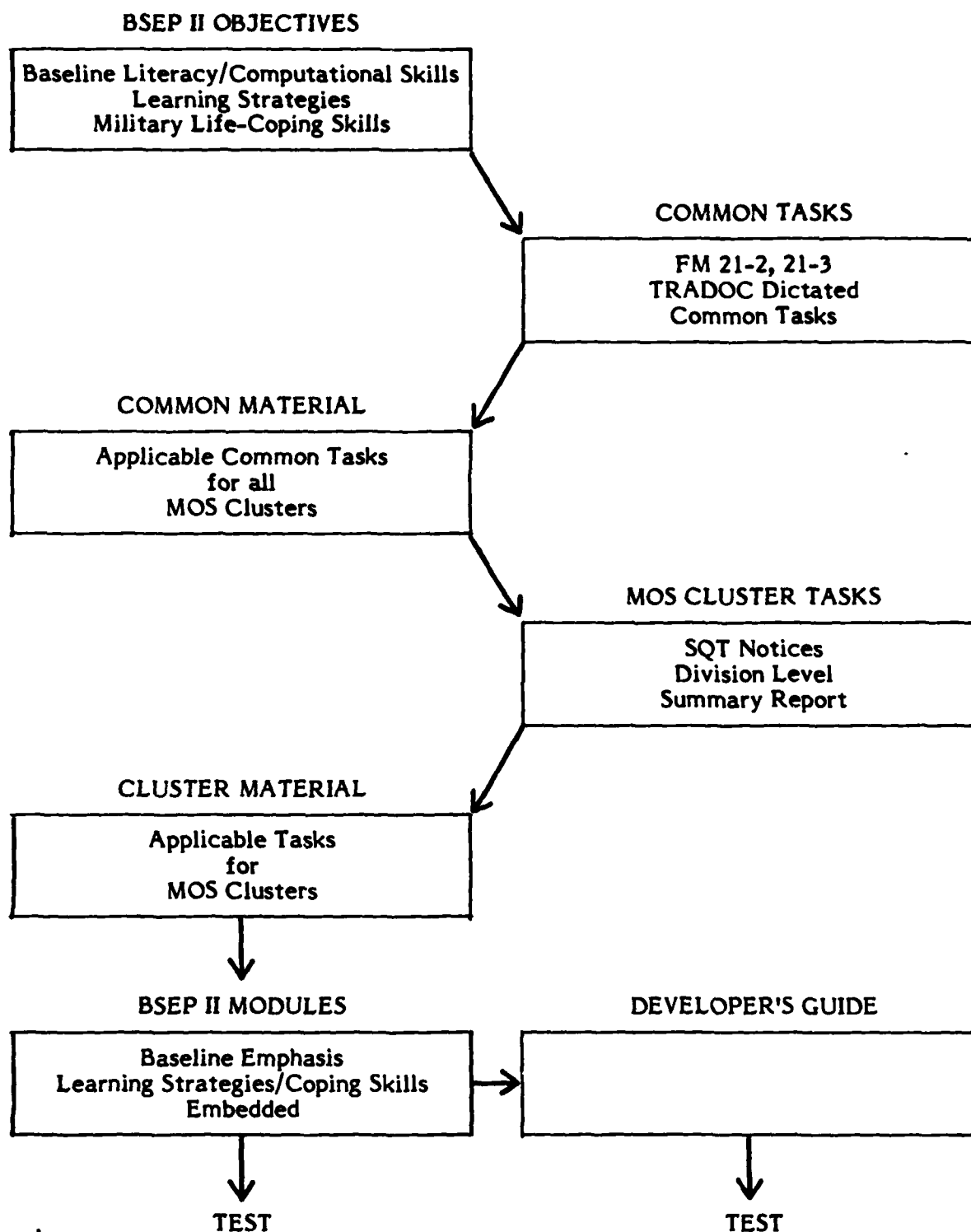


FIGURE 10: BSEP LESSON DEVELOPMENT GUIDE

**TABLE 12: TRADOC DICTATED TASKS FROM THE
SOLDIER'S MANUAL OF COMMON TASKS**

<u>TASK NUMBER</u>	<u>TASK TITLE</u>
031-503-1009	Drink, use the latrine, and sleep while wearing protective clothing
071-318-2202	Engage targets with an M72A2 Law
031-503-1002	Put on and wear an M17-series protective mask
081-831-1002	Perform cardiopulmonary resuscitation (CPR) on an adult using the one-man method
071-311-2007	Engage targets with an M16A1 rifle
071-327-0201	Maintain an appropriate level of physical readiness

BSEP II TASK CATEGORIZATION CHECKLIST

Name/number of task/material _____

MOSs _____

Prerequisites _____

Skills Included in Task/Material:

Reading: RGL=

Test _____
 Tables & Graphs _____
 Indices _____
 Procedural Directions _____
 Army/MOS-specific vocabulary _____

Computation

Addition _____
 Subtraction _____
 Multiplication _____
 Division _____
 Fractions _____
 Percents _____

Learning Strategies Applicable

SQ3R _____
 Organization/outlining _____
 Elaboration/extension _____
 Tables/flowcharts _____
 Mnemonics _____
 Text analysis _____
 Categorization _____
 Adjunct Questions _____

Life Skills

Applicable beyond work _____
 Problem solving _____
 Human Relations _____
 Coping with stress _____
 Time utilization _____
 Budgeting _____
 Planning _____

Proportion of task which can be taught:

In class _____
 With no special equipment _____
 Individually _____

RECOMMENDED BSEP II USAGE: _____

FIGURE 11: PROTOTYPE II BSEP TASK CATEGORIZATION CHECKLIST

In like manner, specific attention was given to a review of the SQT notices for the 12 MOSs identified in the analysis of the Fort Ord BSEP II-eligible population. Data from this review were compared with those resulting from an analysis of the quarterly Division Level Summary Report to further narrow the selection of soldier material that is most pertinent to the Fort Ord population. The Division Level Summary Report is particularly useful in this regard in that it provides an item-by-item analysis within each MOS of SQT performance during the previous 60-day period. At Figure 12 is an extract of Fort Ord's December 81 report. It provides an example of how the report was used to identify soldier manual material that is appropriate and useful to incorporate in BSEP II lesson modules.

The Class Management System

The significant features of the class management system developed to deliver the separate curriculum components discussed above are as follows:

- All curriculum components are open-ended, allowing for a free entry/exit governed by diagnostics (Pre-and post-test instruments) for each module.
- All course work is self-paced and teacher facilitated.
- Peer tutors are designated to assist the teacher in managing course materials and to aid peer students in work tasks.
- Life Coping Skills module materials are embedded in the Reading Comprehension and Math Story Problems components of the Basic Literacy curriculum.
- Incentives, tailored to the student population, are integral to the management system.

MOS 11B SQT 1

(FOR SOLDIERS SCORED BETWEEN 16 OCT 81 AND 04 DEC 81)

SHORT TITLE	NUMBER TESTED	NUMBER GO	NUMBER NO GO	PERCENT PASSED
First Aid Stop Bleed	227	129	98	57
Determine an Azimuth	227	89	138	39
Determine Grid Coord	227	63	164	28

FIGURE 12: EXTRACT - DIVISION LEVEL SUMMARY REPORT 05 DEC 1981

Figure 13 outlines the class management system which guides the student's progress. Based on a student's TABE pretest, he/she is enrolled in one or more of the sub-courses of the literacy skills curriculum (i.e., the Reading course, the Language course or the Math course). The student then takes a diagnostic pretest which addresses the material contained in the first module of the course. If the student fails a module pretest, the instructor assigns specific worksheets developed to teach the student those skills which he/she failed on the module pretest. The assignment of worksheets is tailored to the individual's specific needs. For example, if a student takes the "Capitalization" module pretest in the Language course and fails only the "Special Groups and Events" portion, then only those activity sheets will be assigned.

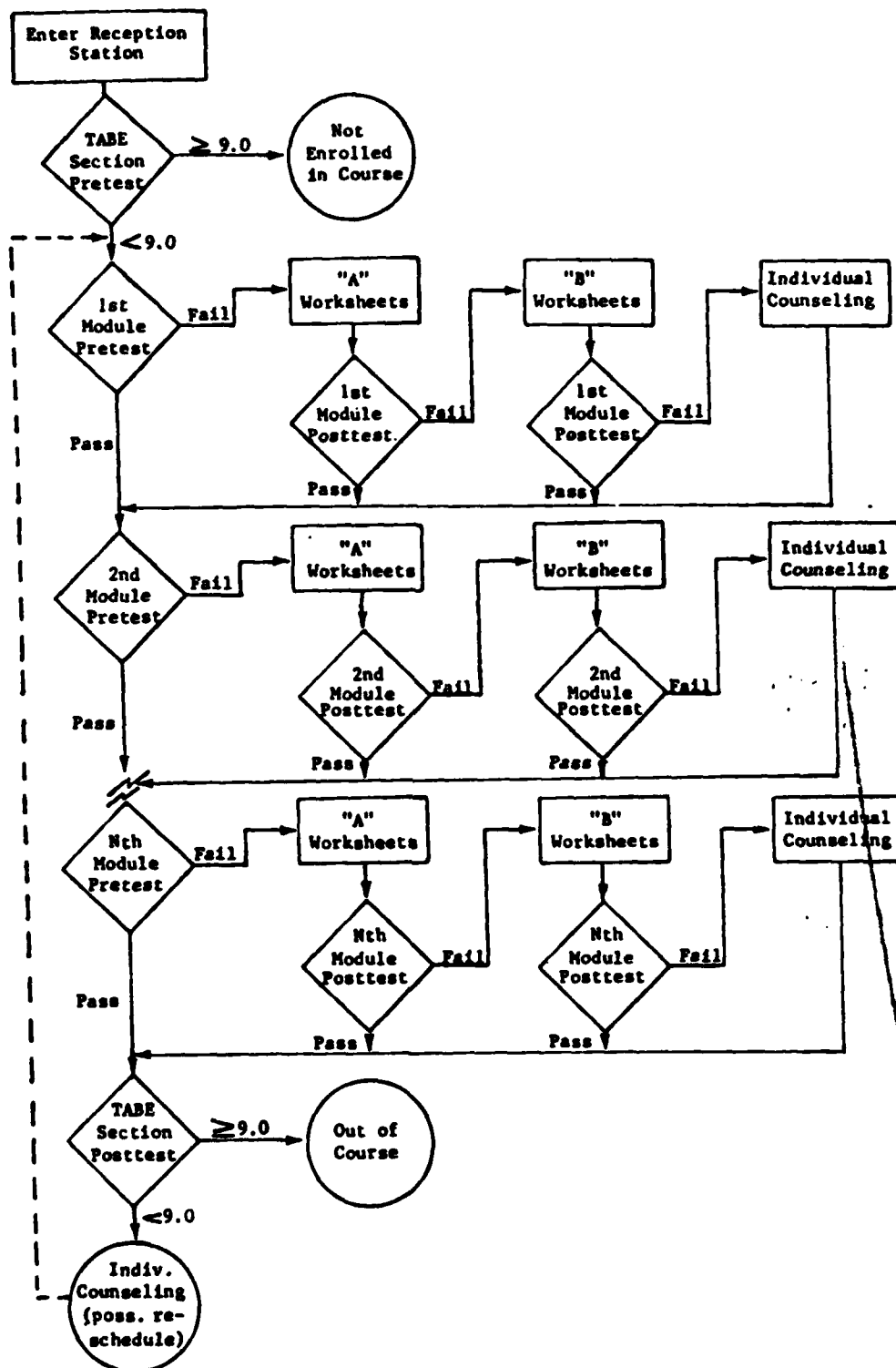


FIGURE 13: CLASS MANAGEMENT

After completing the assigned worksheets, the student takes the module posttest. If the student passes the posttest, he/she goes on to the next module; if not, he/she is recycled through the same module and is assigned different worksheets for further practice in the trouble areas.

If a student still fails the module posttest after two sets of worksheets, he/she should be individually counseled by the course instructor to determine whether to continue further with individual testing or be passed on to the next module without further testing. However, as the subject matter is divided into small chunks by the activity sheets, it is expected that failure of both module posttests by a given student will be rare.

Once a student has completed work in, or has successfully challenged all modules of, the course, he or she may take the relevant section of the TABE as a course posttest. Again, since the course itself is presented in small chunks and is self-paced, it is expected that a student will advance on the TABE posttest. However, if this should not happen, the student may be individually counseled and may possibly be re-scheduled for BSEP II.

As reflected in Figure 13, each course is divided into modules and each module is further divided into activity sheets. These activity sheets are the lowest task requirements of the course. Every skill needed for criterion performance on the TABE, and for good command of basic reading/language/math skills, is reflected on at least one activity sheet. Further, each activity sheet teaches only one skill and drills the student to mastery on that skill. Beyond the basic skill content of the activity sheets, most lessons incorporate Army job-related language, skills, and knowledge. These lessons follow a simple format, allowing most activity sheets to be readily rewritten to support job training and unit performance specific to any MOS. The activity sheets most amenable to MOS tailoring are the entire reading and language courses, and the math story problems module.

CHAPTER 4 FIELD TEST

General

The field test was designed to evaluate the effectiveness and practicality of both the BSEP II lessons that incorporate soldier material and the management system developed to integrate BSEP II and unit training. The test was conducted within the constraints imposed by: 1) the existing training/support cycles, 2) the current method of identifying BSEP II students, and 3) the current method of scheduling BSEP II courses. Essentially, this involved the conduct of BSEP II courses for those soldiers who, through TABE test results, were identified as BSEP II eligibles and were authorized by their commanders to attend a BSEP II course during a four-week period of a support cycle. The test period ran from 1 April 1982 to 31 August 1982.

Inservice Teacher Training

The Director of the Monterey Peninsula Unified School District's Adult Education Office decided that three of the five BSEP II teachers would participate in a 12 hour inservice training activity. Training was conducted in four-hour sessions on Monday, Wednesday, and Thursday of the week immediately preceding the beginning of the BSEP II classes that would utilize the new material. An outline of the training sessions is presented in Table 13.

The stated objectives of the training effort were to assure that teachers gained an understanding of the new materials and could demonstrate the use of them within the class management system. An implicit objective was to obtain the support of the teachers, which was considered essential to successful implementation of the new program. All objectives were achieved. Plans were made for project team members and the BSEP II teachers to meet weekly during the test period to review, critique, and modify course materials and class management procedures.

TABLE 13: BSEP II INSERVICE TEACHER TRAINING

DAY	PRINCIPAL AGENDA ITEMS
1 (4 hours)	Project Overview Description of BSEP II The Military Setting Description of New Curriculum
2 (4 hours)	Class Management Curriculum Materials Practice Session
3 (4 hours)	Practice Session Integration Design Problem Solving Session

Design

Soldiers participating in BSEP II during the test period were assigned to one of three test groups:

- Experimental Group: Subjects in this group attended BSEP II classes that used the new curriculum materials developed for this research project.
- Standard Control Group: Subjects in this group attended the standard, teacher-taught BSEP II classes.
- PLATO Control Group: Subjects in this group followed the CAI formatted BSEP II curriculum delivered via PLATO.

Normal class assignment procedures were followed when students reported for class. Based on a review of TABE scores, the BSEP II course coordinator assigned students to one or two of the following class sections:

- Language/Reading (Low TABE Score)¹
- Language/Reading (High TABE Score)
- Math (Low TABE Score)
- Math (High TABE Score)

Thus a student was enrolled in any one of the following section configurations:

- One of the Language/Reading Sections (High or Low).
- One of the Math Sections (High or Low).
- A Language/Reading Section (High or Low) and a Math Section (High or Low).

The Director of MPUSD's Adult Education Office assigned teachers on the basis of one teacher per two class sections. A teacher was responsible for teaching one language/reading section and one math section each day. Both sections were taught either in the morning or in the afternoon, depending on the desires of unit commanders as relayed to the Education Center through the unit counselors.

When one of the teachers trained with the new materials was assigned a class, that class then became an experimental group for test purposes. This resulted in the new material being used with both "High" and "Low" TABE score students. Remaining classes were used as standard control groups.

At the first class meeting in the experimental and standard control groups, students were told that a few spaces were available to pursue BSEP II via PLATO in lieu of regular class attendance.² Those who volunteered then became members of the PLATO control group.

¹While the specific criteria for this division varied somewhat, it was usually established at about the 6.5 grade level (i.e., scores below the 6.5 grade level would place a student in the "Low" section).

²Eight of sixteen PLATO terminals at Fort Ord are reserved for BSEP II students.

Teachers for the experimental group classes used all the new materials that were available during a given class period. Teachers for the standard group classes used the standard materials for the existing BSEP II curriculum and did not have access to any of the new materials. The PLATO curriculum was followed in the third group.

Module materials for the literacy skills component were developed throughout the test period, which required a carefully supervised plan for introducing the new materials into the classes. This procedure complicated evaluation efforts in that experimental classes conducted at the end of the test period relied almost totally on new materials, while those conducted at the beginning of the period had use of fewer of the new materials. The experimental materials were substituted for the existing materials on a one-for-one basis as shown in Figure 14. This procedure enabled the project team to introduce and test materials incrementally without disrupting the conduct of a complete BSEP II class.

The learning strategies component, designed as a self-paced, adjunct study package, was given to students for independent study outside the classroom. Early in the test period, teachers reported that students did not appear to be using the materials. The teachers themselves were extremely reluctant to devote any classroom time to the use of the package. This reluctance is understandable and stems from the fact that there was so little time available to work on materials that contribute more directly to preparing students to perform well on the end-of-course TABE.

Evaluation Measures Employed

Having developed a systematic procedure to integrate selected Soldier's Manual material into the BSEP II curriculum, the major thrust of the evaluation effort was directed toward measures that would indicate the relative effectiveness of the materials in bringing about gains in basic literacy skills. Inasmuch as the TABE is the sole instrument used to place students in the program and to evaluate their progress, it served as the principal measure throughout the test period. The hypothesis tested was that the materials developed in the project

CLASS PERIOD 1: 5 APRIL - 30 APRIL

READING	LANGUAGE	MATH
Vocabulary	Capitals	Whole Numbers
Spelling	Punctuation	Fractions
Locators & Visuals	Grammar	Decimals
Text		Percents
		Measures
		Math Concepts
		Story Problems

CLASS PERIOD 3: 3 MAY - 28 MAY

READING	LANGUAGE	MATH
Vocabulary	Capitals	Whole Numbers
Spelling	Punctuation	Fractions
Locators & Visuals	Grammar	Decimals
Text		Percents
		Measures
		Math Concepts
		Story Problems

CLASS PERIOD 5: 7 JUNE - 3 JULY

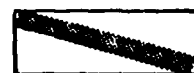
READING	LANGUAGE	MATH
Vocabulary	Capitals	Whole Numbers
Spelling	Punctuation	Fractions
Locators & Visuals	Grammar	Decimals
Text		Percents
		Measures
		Math Concepts
		Story Problems

CLASS PERIOD 6: 6 JULY - 30 JULY

READING	LANGUAGE	MATH
Vocabulary	Capitals	Whole Numbers
Spelling	Punctuation	Fractions
Locators & Visuals	Grammar	Decimals
Text		Percents
		Measures
		Math Concepts
		Story Problems

CLASS PERIOD 7: 2 AUGUST - 27 AUGUST

READING	LANGUAGE	MATH
Vocabulary	Capitals	Whole Numbers
Spelling	Punctuation	Fractions
Locators & Visuals	Grammar	Decimals
Text		Percents
		Measures
		Math Concepts
		Story Problems



Module materials introduced into classroom



Complete module implemented in class

FIGURE 14: MODULE IMPLEMENTATION SCHEDULE

could be used to teach BSEP II classes, and that student gains in basic literacy skills would be equal to, or greater than, those obtained with the use of standard materials in the existing curriculum.

Data to test this hypothesis were obtained by comparing pre- and post-TABE scores of students in the experimental groups with those of the students in the control groups.

Originally, the project team planned to determine if the experimental curriculum could contribute to improved performance on the SQT. SQT performance data would be compared for: 1) BSEP II eligibles who did not enroll in a BSEP II course; 2) BSEP II eligibles who completed either the standard or the PLATO curriculum; and 3) BSEP II eligibles who completed the experimental curriculum. This plan proved impractical for several reasons. The division's Master Training Schedule, the schedule of SQT test activities, and the BSEP II class schedule were too varied and unsynchronized for this purpose. It was, therefore, impractical to attempt to identify students who could participate in BSEP II, take an SQT, and receive an SQT test report all within the five-month test period. Furthermore, the project team found that the BSEP II course coordinator's opportunity to plan and program training requirements is very limited. While some unit education counselors are able to obtain some advance attendance information, actual class attendance is not really known until soldiers report for the first class meeting. The concept has merit, however, and could be pursued by Education Center/MPUSD representatives at a later date (i.e., with more time to follow individuals from the BSEP II training through SQT testing). Most of the BSEP II students are in their first enlistment period and have not had an SQT. With sufficient planning and coordination, major units (Brigades, Division Artillery, and Division Support Command) could arrange for eligible soldiers to complete a BSEP II class just prior to taking the Skill Component of the SQT. Assuming such a scheduling task could be accomplished, the data obtained would provide a measure of the extent to which the new materials contribute to a soldier's preparation for and performance on the test.

In an attempt to measure gains resulting from the learning strategies component of the experimental curriculum, a 30-item study skills questionnaire was administered in five of the BSEP II classes (three experimental group classes and

two standard control group classes). However, the fact that the learning strategies material was not used consistently or purposefully argues against the use of this data.

No attempt was made to measure gains in life coping skills that might have resulted from the embedding of that material in the literacy skills component.

CHAPTER 5. FIELD TEST RESULTS

LITERACY SKILL GAINS

General

This section contains an analysis of the data obtained from TABE pre- and post-tests administered during the field test. Table 14 provides enrollment data for each of the test groups by class period. Fewer students were enrolled during May and June than during April and July. Such fluctuations are common and are a result of the schedule of training and support cycles for troop units. A student enrolled in both the language/reading course and the math course is counted as two enrollments in the same class period. Thus, total enrollments for a given class period are always more than the actual number of students.

Three TABE subtest scores are used in the analysis. These are the same subtest scores counselors and administrators use to determine eligibility and to evaluate progress.

- The language subtest measures capitalization, punctuation, and grammar skills.
- The reading subtest measures vocabulary and reading comprehension from text, locators, and visuals.
- The math subtest measures proficiency in addition, subtraction, multiplication and division as applied to number and story problems. Understanding of basic math concepts (commutation, symbols, and geometric shapes) is also measured.

Procedures and Results

Table 15 presents pretest and posttest TABE data for the three groups. The N for each group on each TABE subtest is reported, along with the mean TABE

TABLE 14: TEST GROUP ENROLLMENT DATA

CLASS PERIOD	EXPERIMENTAL GROUP (N)		STANDARD CONTROL (N)		PLATO CONTROL (N)	
	Lang/Read	Math	Lang/Read	Math	Lang/Read	Math
¹ 5 Apr - 30 Apr	29	31	16	17	1	0
² 12 Apr - 7 May	0	0	11	12	5	4
³ 3 May - 28 May	15	14	0	0	0	0
⁴ 10 May - 4 Jun	0	0	11	17	12	11
⁵ 7 Jun - 12 Jul	4	5	0	0	6	5
⁶ 6 Jul - 30 Jul	20	21	17	21	3	6
⁷ 2 Aug - 27 Aug	20	27	14	16	7	2
TOTALS	88	98	69	83	34	28

TABLE 15: TABE PRETEST AND POSTTEST DATA: MEAN TEST SCORES,
ANALYSES OF VARIANCE BETWEEN GROUPS

GROUPS		PRETEST GRADE LEVEL		
		LANGUAGE	READING	MATH
Experimental BSEP II	N	79	82	88
	\bar{X}	5.971	6.546	6.368
	SD	1.628	1.355	0.896
Standard BSEP II	N	57	62	74
	\bar{X}	6.296	6.906	6.400
	SD	1.556	1.252	1.153
PLATO BSEP II	N	29	34	28
	\bar{X}	5.483	6.371	5.932
	SD	1.403	1.844	1.254
Analysis of Variance	df	164	177	189
	F	2.616	1.862	2.182
	Sig.	p=0.076	p=0.158	p=0.116
GROUPS		POSTTEST GRADE LEVEL		
		LANGUAGE	READING	MATH
Experimental BSEP II	N	87	87	96
	\bar{X}	7.151	7.825	7.487
	SD	1.603	1.580	1.261
Standard BSEP II	N	68	68	81
	\bar{X}	7.201	7.731	7.525
	SD	1.684	1.475	1.384
PLATO BSEP II	N	33	34	28
	\bar{X}	6.633	7.256	7.075
	SD	1.774	1.869	1.283
Analysis of Variance	df	187	188	204
	F	1.450	1.586	1.309
	Sig.	p=0.237	p=0.208	p=0.272
Analysis of Variance with Pretest score as a Covariant	F	0.049	2.272	0.236
	Sig.	0.952	0.106	0.790

grade level on the subtest and the standard deviation of the scores. Analyses of variance were run across groups for each of the three subtests to determine whether the entry and/or exit populations of the groups differed. For the pretest ANOVA, results show that the groups did not differ on language, reading, and math scores ($p < .05$ is used as the significance level for rejecting the null hypothesis throughout these analyses).

Posttest ANOVAs show no significant differences in the populations of the three groups in terms of grade level proficiency on any of the TABE subtests measured. The three populations entered at approximately the same level and exited at approximately the same level. For this reason, the next procedure examines the changes that occurred between pretest and posttest scores for each group. Gain scores were computed for each student by subtracting the pretest grade level in each subtest from the corresponding posttest grade level. Gain scores are presented in Tables 16 through 18.

In Table 16, mean grade level gains for each subtest are shown by class period. The slight fluctuation in gains from class to class may be due to the small Ns. Table 17 shows group gains for the entire test period. Language gains averaged from about 1.1 to about 1.4 grade levels; reading gains averaged from less than 0.9 to over 1.2 grade levels; and math gains averaged from over 1.1 to over 1.2 grade levels. An analysis of variance across groups for each subtest indicates there were no significant differences between the groups on any gain score. The gain scores, as shown in Table 18, represent a significant difference between pretest and posttest grade levels for all groups on all subtests. Student's t-tests for paired observations demonstrate significant gains in basic skills levels for all groups as measured by the TABE.

Figure 15 presents mean gain scores for each group on each subtest. The range in mean gain scores is shown for each subtest. The PLATO group showed the largest language gain; the experimental group showed the largest reading gain;

TABLE 16: GAINS IN TEST SCORES: MEAN GRADE LEVEL GAINS FOR EACH CLASS PERIOD

CLASS PERIOD		EXPERIMENTAL			STANDARD			PLATO		
		Lang	Read	Math	Lang	Read	Math	Lang	Read	Math
1	$\frac{N}{X}$	25 0.956	25 1.580	26 1.081	13 0.623	13 0.577	15 1.053	1 0.300	1 0.100	0 ---
2	$\frac{N}{X}$	0 ---	0 ---	0 ---	6 1.417	7 1.171	8 1.375	5 1.840	5 1.060	4 1.625
3	$\frac{N}{X}$	13 1.423	13 1.423	12 1.423	0 ---	0 ---	0 ---	0 ---	0 ---	0 ---
4	$\frac{N}{X}$	0 ---	0 ---	0 ---	9 0.333	9 1.000	15 1.360	8 1.487	12 0.967	11 1.173
5	$\frac{N}{X}$	4 2.600	4 2.075	5 0.680	0 ---	0 ---	0 ---	5 1.440	6 1.000	5 1.740
6	$\frac{N}{X}$	14 1.147	19 0.768	18 0.856	16 2.269	17 0.994	20 1.200	2 1.650	3 0.967	6 0.500
7	$\frac{N}{X}$	18 1.572	20 1.060	26 1.369	12 0.683	14 0.971	15 1.133	7 1.114	7 0.600	2 0.450

TABLE 17: GAINS IN TEST SCORES: MEAN GAINS IN SCORES FOR EACH GROUP, ANALYSIS OF VARIANCE BETWEEN GROUPS

GROUPS		Gain in Language	Gain in Reading	Gain in Math
Experimental BSEP II	N	78	81	87
	\bar{X}	1.306	1.260	1.146
	SD	1.331	1.165	0.897
Standard BSEP II	N	56	60	73
	\bar{X}	1.145	0.920	1.208
	SD	1.379	0.948	0.965
PLATO BSEP II	N	28	34	28
	\bar{X}	1.418	0.885	1.143
	SD	1.186	1.060	1.226
Analysis of Variance		df	161	174
		F	0.455	2.358
		Sig.	p=0.636	p=0.098
				187
				0.093
				p=0.911

TABLE 18: GAINS IN TEST SCORES: SIGNIFICANCE OF DIFFERENCES BETWEEN PRETEST AND POSTTEST SCORES

GROUPS		Language Pretest to Posttest	Reading Pretest to Posttest	Math Pretest to Posttest
Experimental BSEP II	df	76	80	86
	t	-8.67	-9.74	-11.91
	sig.	p<0.001	p<0.001	p<0.001
Standard BSEP II	df	55	59	72
	t	-6.21	-7.51	-10.70
	sig.	p<0.001	p<0.001	p<0.001
PLATO BSEP II	df	27	33	27
	t	-6.33	-4.87	-4.93
	sig.	p<0.001	p<0.001	p<0.001

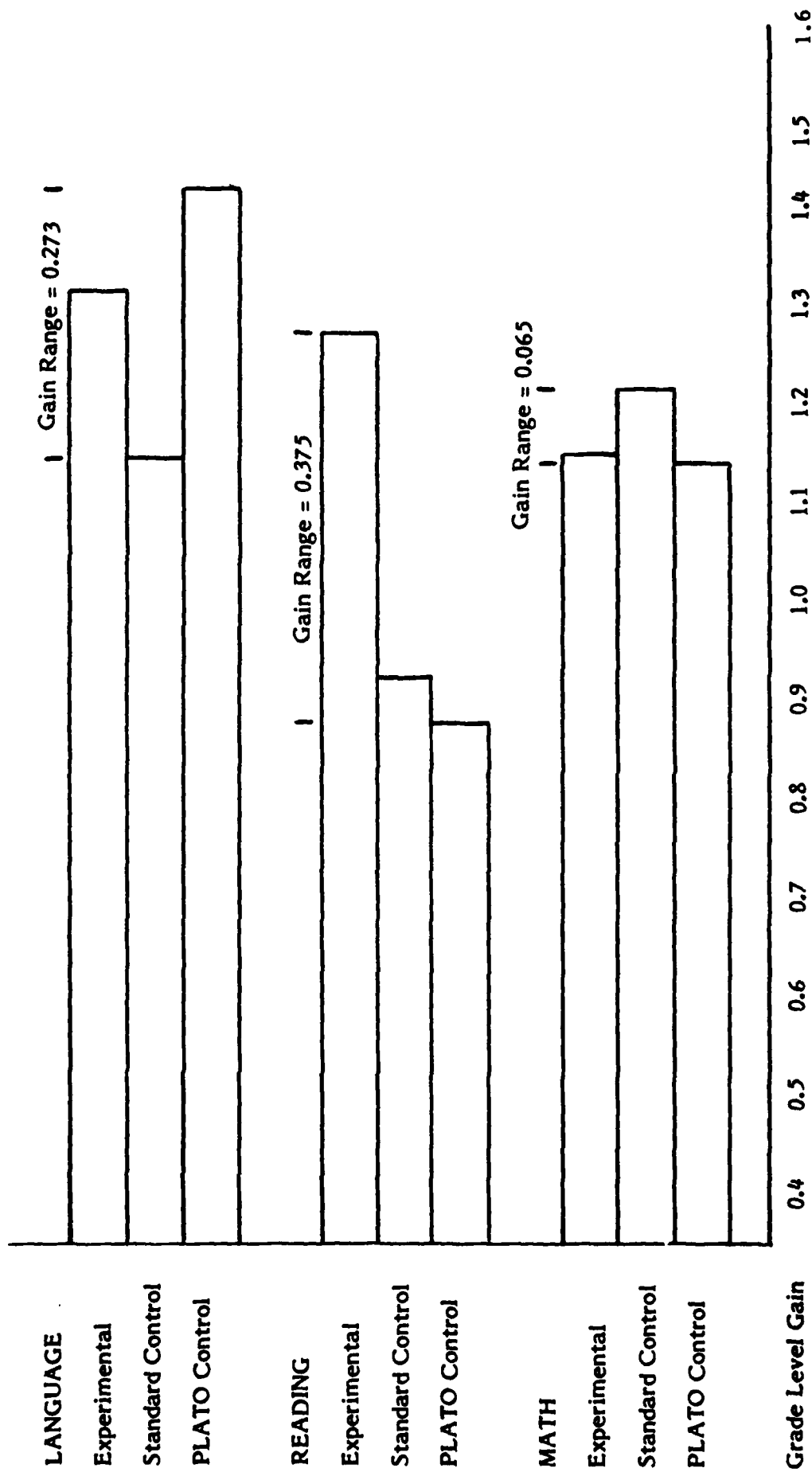


FIGURE 15: MEAN GAIN SCORES FOR TEST GROUPS

and the standard control group showed the largest math gain. However, as shown in Table 18, the gain differences between groups were not significant.

Discussion

The preceding analysis represents the project team's efforts to provide a measure of the extent to which the new curriculum materials contribute to gains in basic literacy skills. Since the Army's sole criteria for assessing both BSEP II needs and gains is the TABE, an analysis of TABE scores served as the basis for this evaluation effort. While this proved acceptable for our purpose in this project, we found a number of problems associated with the use of the TABE in BSEP II at Fort Ord. Apparently, only two versions of the test are being used throughout the Army; level M, Form 3 (pretest) and Level M, Form 4 (posttest). Consequently, a significant number of soldiers - those who are recycled through multiple BSEP II courses - are being tested repeatedly with the same version of the test. There is a smaller number of soldiers who have repeated the BSEP II courses so often that they have been tested several times on both versions of the test.

A related problem involves the use of the TABE scores to assess training need and to assign students to class sections. In many instances, TABE scores are from six months to more than a year old when class assignments are made. Thus, pre-course assessments do not take into account interim learning experiences, and are probably not as accurate as they could be. Problems involved in the use of the TABE as a criterion instrument are not likely to be solved until new minimum competency tests and testing techniques are developed in conjunction with the Army's five-year BSEP master plan discussed in Chapter 2.

OTHER TEST EFFORTS

Lesson Developer's Guide

The Lesson Developer's Guide contained in ARI Research Note 83-38 was also tested during this project. A draft guide was developed by the project team. One of the MPUSD BSEP II instructors then used the draft guide to develop two

lesson modules, one a grammar module, the other a story problem module. In both instances, the guidance provided enabled the instructor to select appropriate Soldier's Manual material and applicable life coping skill demands, and to develop self-paced activity sheets to teach the basic literacy skills. The two modules were determined to be of acceptable quality after being used in the classroom and were incorporated into the experimental curriculum (see Tabs C and J of RN 83-36). Minor modifications were then made in the Lesson Developer's Guide in response to comments and recommendations from the teacher who used the guide, and it was prepared in its final format.

Class Management System

The self-paced class management system presented in Figure 5, Chapter 3 was introduced in the experimental BSEP II classes along with the earliest experimental modules. Teachers used the self-paced system wherever they presented experimental materials and returned to the traditional lock-step class management system to teach those subjects not yet covered by the experimental modules. As more new material was introduced, classes gradually became more self-paced. Teachers using the new system stated that self-pacing allowed them to spend more time with individual students and insured that more advanced students would not be held back by slower ones. Students themselves quickly caught on to the new system and frequently volunteered to be peer instructors. Reaction to the management system by the Education Services Officer and MPUSD was very favorable, and the system has been adopted for continued use beyond the end of the test period. Further evidence of the perceived value of the new program is represented in the Fort Ord ESO's interest in converting the learning strategies component and the life coping skills material into a CAI format for delivery by teaching machines available at Fort Ord.

Incentives

A survey was administered to BSEP II students to determine what kinds of incentives might be successfully used in conjunction with the BSEP II program. A copy of the survey appears as Figure 16. Incentives listed on the survey were

A research team is doing a study of BSEP at Fort Ord this year. Some changes may be made to the BSEP program. One of the changes could be to give soldiers special rewards for working hard or doing well in BSEP.

Before the research team can decide what kinds of rewards to give for good work, they have to know what you would like to do or earn. Here is a list of rewards that you might be able to earn by working hard in BSEP. Please put an X in one of the boxes to the right of each possible reward to show how you feel about earning it.

	+3 I think this is a great thing to do.	+2 I would like to do this pretty much.	+1 I would like to do this a little.	0 I don't care whether I do this or not.	-1 I would dislike this a little.	-2 I would dislike this a lot.	-3 I don't ever want to do this at all.
1. Play a video game.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Do my classwork on a computer.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Learn how to work a computer.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Read a school book.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Read whatever I want to read.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Write whatever I want to write.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Have time off.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. Learn a new skill.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. Take a personality test and talk to a counselor about it.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. Take a job aptitude test and talk to a counselor about it.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

FIGURE 16: BSEP II REWARDS RATING CHECKLIST

I think this is a great thing to do.

I would like to do this pretty much.

I would like to do this a little.

I don't care whether I do this or not.

I would dislike this a little.

I would dislike this a lot.

I don't ever want to do this at all.

POSSIBLE BSEP REWARDS

11. Have a letter of commendation sent to my commander.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12. Have a letter of commendation sent to my parents.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13. Earn a diploma or graduation certificate at the end of the course (but not a HS diploma).	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14. Be on an "honor roll" posted in the barracks.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
15. Become a peer tutor so I can help teach other students.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
16. Finish BSEP a couple of days early.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
17. Have a news story about me printed in my hometown paper.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
18. Have a news story about me printed in the Fort Ord Panorama.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
19. Get a day off from class.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
20. Work on an extra assignment of my own choice.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

FIGURE 16. (Continued)

I think this is a great thing to do.

I would like to do this pretty much.

I would like to do this a little.

I don't care whether I do this or not.

I would dislike this a little.

I would dislike this a lot.

I don't ever want to do this at all.

POSSIBLE BSEP REWARDS

21. Get time off for a smoke break in the hall.
22. Listen to the radio in class, using earphones.
23. Sit in my car and listen to the radio, as loud as I want.
24. Wear a badge in class to show others I'm cool.
25. Get a three-day pass.

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

FIGURE 16. (Continued)

chosen from a general review of Armed Forces incentives and from a determination of the types of incentives which might be available or feasible at Fort Ord. Table 19 lists the incentives from most attractive to least attractive. Incentives were rated on a scale of +3 = "I think this is a great thing to do" to -3 = "I don't ever want to do this at all," with a rating of 0 being neutral. The incentives are listed in rank order by mean rating, with rank order 1 being the most desirable incentive.

Six of the 25 incentives received mean ratings of +2.0 or higher, where +2 = "I would like to do this pretty much." The most attractive incentive was a letter of commendation to the soldier's commander. Of the top ten incentives, five were related to learning (#3, 8, 10, 15, and 20). Three were related to personal recognition (#11, 12, and 13), and two were related to recreation or free time (#7 and 25). The simplest category of incentive to institute within a BSEP II program would be personal recognition. However, students preferred their recognition to be in written form and of limited distribution (e.g., letter to commander, letter to parents, or certificate). Students were not particularly interested in having news items about them printed in newspapers (items #15 and 21) or in having their names posted on an honor roll (item #12), and they did not want to wear a badge or token of recognition in class (item #25).

Besides letters of commendation and certificates, another category of incentive which would be relatively easy to provide and has direct job applicability is that related to learning a new skill. Students who worked hard in class could be given the opportunity to take a standardized job aptitude test at the testing center, and on the basis of test results, they could be given the opportunity to enroll in correspondence or computer-assisted courses to learn a new skill in an area of particular aptitude or interest.

TABLE 19: RANK ORDER OF PREFERRED REWARDS FOR
BSEP WORK: BSEP SURVEY, AUGUST, 1982

N = 39

Rank Order	\bar{X}	Standard Deviation	Item #	Item Name
1	2.539	0.913	11	Letter of commendation to commander
2	2.500	0.980	8	Learn a new skill
3	2.444	1.275	25	Three-day pass
4	2.308	1.301	13	Earn a diploma or certificate
5	2.243	1.278	3	Learn to use a computer
6	2.105	1.301	10	Take a Job Aptitude Test
7	1.974	1.551	12	Letter of commendation to parents
8	1.842	1.794	7	Time off
9	1.605	1.499	20	Extra assignment - my choice
10	1.568	1.385	15	Be a peer tutor
11	1.421	1.621	1	Play a video game
12	1.410	1.697	14	Name on honor roll in barracks
13	1.324	1.973	19	Day off from class
14	1.256	1.888	2	Do classwork on a computer
15	1.243	1.770	17	Story in hometown newspaper
16	1.237	1.866	9	Take a personality test
17	1.105	1.970	16	Finish class a couple of days early
18	1.079	1.477	4	Read a school book
19	1.000	1.516	5	Read whatever I want
20	0.833	2.131	22	Listen to radio with earphones
21	0.811	1.753	18	Story in Fort Ord Panorama newspaper
22	0.649	1.798	6	Write whatever I want
23	0.639	2.685	21	Take a smoke break
24	-0.194	2.291	23	Listen to radio in my car
25	-0.889	2.265	24	Wear a badge in class

CHAPTER 6. OBSERVATIONS AND RECOMMENDATIONS

General

The observations and recommendations contained in this section range from those that are specific to the conduct of the existing BSEP II to those of a more general nature concerning the future implementation of a Functional Basic Skills Education Program. The views reflected are those of project team members. They evolved over the course of the many hours devoted to this project during the past year and, for the most part, they are subjective evaluations of the Army's BSEP II efforts.

Command Support of BSEP II

Of the many variables that affect the conduct and administration of BSEP II at the installation level, few are as important as the degree to which the program is valued and supported by leaders within the military chain of command. When BSEP II is viewed as an activity that contributes to the larger military mission, there is a sincere effort to support it. On the other hand, when BSEP II is viewed as an unnecessary requirement that detracts from mission accomplishment, commanders will avoid meaningful involvement in the program. The difference in actions that result is represented in two commanders encountered during the past year. One enthusiastic company commander takes a personal interest in identifying eligible soldiers and carefully plans for their attendance in BSEP II throughout the training year. Another commander, at a higher level, says that he uses BSEP II classes to "flush his toilet" (i.e., as a place to send incompetent or unmotivated soldiers to prevent them from interfering with activities within his unit). Most commanders seem to fall somewhere between these two extremes.

One way to enhance the value of BSEP II, as perceived by Army leaders, is to develop curriculum materials that are obviously relevant to work performed at the job site. The materials contained in this report represent the project team's

efforts to do this on a comparatively small scale. The opportunity exists for the Army to expand this basic approach by coordinating a BSEP II curriculum development effort with the development of the SQT. Currently, the elapsed time between the identification of critical tasks to be tested and the administration of the SQT in the field is sufficient to allow concurrent development of relevant materials for the BSEP II curriculum.¹

Another initiative that could assist in generating understanding and support from commanders is the preparation and periodic presentation of a succinct briefing on the subject of BSEP II. The briefing would explain the nature, purpose, and conduct of BSEP II and would suggest a variety of actions commanders could take to support the program. Few commanders understand the magnitude of the tasks involved in basic literacy skill training. Illustrative of this problem is the fact that at Fort Ord, students are sometimes "graduated" at the end of each 80-hour class period regardless of their actual progress during the course. Additionally, many commanders express disappointment when they learn that a soldier gained only one or two grade levels after the 40 to 80 hours of instruction.

Commanders must understand that students require support and encouragement in their efforts to improve. The general climate in which students are required to work is seldom conducive to learning. Many students report a variety of factors that impede desired progress. Two of the most common are:

- Difficulties associated with being released from the unit to attend classes.
- Guard and detail duties that require students to work late at night during class periods.

Another possible initiative, which may be applicable to the Fort Ord installation only, is the integration of the BSEP II courses into the system used to manage

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If/when the Army replaces the SQT, as seems likely, the new testing program can also be coordinated with BSEP II curriculum development. See "Hike, Job Skill Tests to Replace SQT," Army Times, Pg. 1, 21 June 1982.

other formal training classes. Currently, the Director, Plans and Training (DPT) for Fort Ord manages a controlled system for providing on-duty, military training wherein the unit commanders identify training needs in the last quarter of each fiscal year. Courses are programmed and scheduled, and the DPT then allocates quotas and monitors their use throughout the next fiscal year. The on-duty Education Center courses (BSEP II) could be integrated into this system. This would require commanders to identify and plan for meeting the base-line literacy training needs of their soldiers. Education Center counselors could assist the commanders in this effort. Most importantly, the ESO and MPUSD could then adequately plan to meet the commanders' needs. The ESO could be more definitive in his guidance to MPUSD, and MPUSD could be more responsive in the delivery of BSEP II courses.

AR 621-5

Certain of the items of guidance contained in AR 621-5 are somewhat ambivalent and/or misdirected. Clarification of such items could lead to better implementation of the program at the installation level.

In paragraph 2-30, the ESO is directed to "use priorities of enrollment, listed below in descending order, in scheduling soldiers for BSEP II instruction:

- a. Soldiers with high reenlistment potential.
- b. Soldiers with high leadership and promotion potential.
- c. Soldiers who need BSEP to meet current MOS and job requirements.
- d. Soldiers desiring to raise their Armed Services Vocational Aptitude Battery score to qualify for a different MOS or Army school."

One difficulty with this guidance is the ambiguity involved in the statement of priorities a, b, and c. What specifically are useful measures of "high potential" and "need"? A second difficulty is that neither the ESO nor any of the counselors are in the best positions to make such determinations. This task,

assessing need and potential, is more appropriate for unit commanders.

In paragraph 2-31, the statement is made that after 240 classroom hours "if a participant is progressing at a successful achievement rate, continuation in the program may be authorized." A difficult question to answer is "What is a successful achievement rate?" The contractor is told to limit the total program to 360 hours of classroom instruction (Table 2-4, AR 621-5); the ESO is to consider continuation after 240 classroom hours; and the student participates in something less than 80 classroom hours during one of five or six periods a year. Successful achievement rate should be defined in more precise terms that are appropriate to actual field conditions.

Use of the TABE as a BSEP II Posttest

Currently, all students at Fort Ord are required to take the TABE at the end of each BSEP II class. In most cases, students are not sufficiently near completion criterion at the end of the 40 or 80 hour class period to warrant this expenditure of time and effort. The four hours spent in the test hall could be better spent on continued work in the classroom. The diagnostics contained in the new class management system (module previews and reviews) will enable instructors to identify those students who are ready for the TABE. Students who have not advanced sufficiently should continue to work in the classroom and then be rescheduled for another BSEP II class period.

Program Length and Class Scheduling

The ambiguity concerning a successful achievement rate results in part from local policies that govern BSEP II class length and scheduling. Generally, soldiers are scheduled for BSEP II classes during a four week period when their units are not involved in "prime-time" (combat) training, and classes are limited to four hours each day. Thus the soldier who needs to pursue a full curriculum (240 to 360 classroom hours) has to repeat the current course five times. This normally requires a year or more to accomplish. Consequently, few of the soldiers at the low end of the basic skill spectrum persist in efforts to meet completion criteria.

Another factor that compounds the problem is that each of the standard (teacher-taught) BSEP II courses is identical to the one that precedes it. The student who repeats the course, therefore, does not necessarily progress to more advanced material. This is true of the language/reading course. Most instructors use a math workbook that allows for individual placement and independent work in the math course.

There are at least two possible approaches to correcting the program length problem.

1. Currently, installation commanders are required to identify BSEP II eligibles within 30 days after their arrival at the permanent duty station (Para 2-5, f., AR 621-5). Those eligibles requiring extensive basic skill training could be required to complete a full BSEP II curriculum before they are allowed to participate in normal unit training activities.
2. The standard BSEP II course could be expanded to six classroom hours a day. This would result in a 50% increase in the length of the current class period (from 80 to 120 hours). Thus a student could receive approximately 240 hours of instruction by attending only two class periods.

By using the class management system described in this report, students can begin work at a level appropriate to their needs and proceed independently at their own pace. This "open entry/exit" feature would enable some students to complete the full curriculum sooner and would assure that all students progress to more advanced materials when prepared to do so.

END